Canadian Interprofessional Health Collaborative
Consortium pancanadien pour l'interprofessionnalisme en santé

An Inventory of Quantitative Tools Measuring Interprofessional Education and Collaborative Practice Outcomes

A Report by the Canadian Interprofessional Health Collaborative (CIHC)

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INTRODUCTION

Interprofessional education and collaborative practice have emerged as learning and clinical practice initiatives to promote optimal patient care. Interprofessional education refers to "occasions when members [or students] of two or more professions learn with, from and about one another to improve collaboration and the quality of care" (Centre for the Advancement of Interprofessional Education 2002). Collaborative practice is an interprofessional process of communication and decision making that enables the separate and shared knowledge and skills of health care providers to synergistically influence the patient care provided (Way et al 2000). Evaluation is a critical component of such initiatives; however, finding the right tools to measure outcomes can be challenging.

This report provides an inventory of quantitative tools measuring outcomes of interprofessional education or collaborative practice, and describes the development of this inventory. This project was completed by a working group of the Research and Evaluation Subcommittee of the Canadian Interprofessional Health Collaborative (CIHC). In 2005, the CIHC was formed to promote collaboration in health and education across Canada. The mandate of the CIHC Research and Evaluation Subcommittee is to strengthen and mobilize research and evaluation capacity in interprofessional education and collaborative practice in Canada.

This comprehensive inventory of quantitative tools measuring outcomes of interprofessional education and collaborative practice is designed to assist researchers and evaluators in determining which of the many published tools to use in various contexts. This inventory is more recent and/or comprehensive than other quantitative tool inventories on the same topic (Canadian Interprofessional Health Collaborative 2009, Carpenter & Dickinson 2008, Heinemann & Zeiss 2002).

METHODS

Inventory focus

The tools in this inventory measure at least one outcome that relates specifically to interprofessional education or collaborative practice. These outcomes are modeled on the work of Carpenter and Dickinson (2008) who catalogued 18 tools of interprofessional education sorted according to Barr's (2005) six-level framework of educational outcomes (which was based on the Kirkpatrick [1967] four-level typology). To maintain a consistent approach, we used the Barr (2005) framework to organize the tools in this review, with modifications. We excluded "learner's reactions" because we were not interested in participants' satisfaction with particular learning events, and we replaced "benefits to patients" with "patient satisfaction" to be more precise in identifying what the tools captured. We added "provider satisfaction" to capture providers' perspectives towards their experiences of working together. For both patient and providers, satisfaction had to be directly related to interprofessional education or collaborative aspects of care delivery, rather than satisfaction in general. The six outcomes are shown in Box 1.

Box 1: Interprofessional Education and Collaborative Practice Outcomes

1. Attitudes about other disciplines or about working with other professions;
2. Knowledge, skills, abilities around interprofessional education and collaborative practice;
3. Behaviour: Individuals' transfer of interprofessional learning to their practices;
4. Organizational level: Interprofessional collaboration at the level of the organization such as organizational culture and organizational readiness;
5. Patient satisfaction: Referring only to the aspects of patients' satisfaction involving interprofessional collaboration;
6. Provider satisfaction: Referring only to the aspects providers' satisfaction involving teamwork processes or work environment involving interprofessional collaboration.

Literature Search

A systematic search of the published literature was conducted with the assistance of a librarian. The search strategy was designed to capture academic articles related to quantitative measurement of interprofessional education and collaboration. Key concepts were searched using MeSH (Medical Subject Headings) and key words. The search terms used in each database are shown in Box 2. Initially, databases were searched for articles in English from January 2000 to October 2009. A second search was conducted in May 2010 to retrieve newer publications and to include the terms "validity" and "psychometrics" from January 2000 onward. Although a search of the grey literature was not conducted due to resource constraints, reports of projects from the Interprofessional Education for Collaborative Patient-Centred Care (IECPCP) initiative, funded by Health Canada from 2003 to 2007, were reviewed for relevant tools. The tools from the IECPCP reports were included in this inventory if they provided additional psychometrics on previously published tools or if the tools were not previously published.[1]

Two hand searches were also conducted. The first search consisted of reviewing references of retrieved articles if the article contained references about earlier use(s) of a tool or further methodological details. The second search involved reviewing journals identified by the team as relevant for research on interprofessional education and collaborative practice. These journals, reviewed from 2000 to 2010, were Journal of Interprofessional Care, Journal of Advanced Nursing, Gerontology & Geriatrics Education, and Medical Education.

Box 2: Databases and Search Terms

CINAHL
MW (inter-profession* or interprofession* or inter-disciplin* or interdisciplin* or inter-occupation* or interoccupation* or inter-institution* or inter institution or inter-department* or interdepartment* or inter-organization* or interorganization* or inter-organisation* or interorganisation* or multi-profession* or multiprofession* or multi-disciplin* or multidisciplin* or multi-occupation* or multioccupation* or multi-institution* or multiinstitution* or multi-organisation* or multiorganisation* or multi-organization* or multiorganization*) and MW (education or practice) and MW (instrument* or questionnaire* or survey or scale or scales) and MW (care team or care teams) and (collaborat*)
Medline 2009
MW (patient care team* or interdisciplin* or inter-disciplin* or multi-disciplin* or multidisciplin* or trans-disciplin* or transdisciplin* or interprofession* or inter-profession* or multi-profession* or multiprofession* or

[1] For a comprehensive list of all the measurement tools used in the IECPCP projects, see CIHC (2009). Report available at cihc.ca/files/CIHC_EvalMethods_Final.pdf.

trans-profession* or transprofession* or inter-occupation* or interoccupation* or multi-occupation* or multioccupation* or trans-occupation* or transoccupation* or cross-occupation* or crossoccupation* or cross-disciplin* or crossdisciplin* or cross-profession* or crossprofession*) and MW (care team or care teams) and collaborat* and MW (questionnaire* or instrument* or scale*) and MW (education* or practice*)
Medline 2010
MW (cross*disciplin* or cross-disciplin* or cross*occupation* or cross-occupation* or cross*profession* or cross-profession*or inter*disciplin* or inter-disciplin*or inter*occupation* or inter-occupation*or inter*profession* or inter-profession* or multi*occupation* or multi-occupation* or multi*disciplin* or multi-disciplin* or multi*profession* or multi-profession*or trans*disciplin* or trans-disciplin*or trans*occupation* or trans-occupation*or trans*profession* or trans-profession*) and (education* or learning* or practice * or care or instruction*) and (collaborat* or ipe or iecpcp or *Patient Care Team or Patient Care Team or interprofessional relations or cooperative behaviour or *patient-centered care) and (questionnaires or health care surveys or psychometrics or program evaluation or measurement$ or evaluation$ or tool$ or scale$ or reliab$ or valid$)
Web of Science
multiprofession* OR interprofession* OR interdisciplin* OR interdepartment* OR interorganisation* OR interorganization* OR multidisciplin* OR multioccupation* OR multiinstitution* OR multiorganisation* OR multiorganization* OR multi-profession* OR inter-profession* OR inter-disciplin* OR inter-department* OR inter-organisation* OR inter-organization* OR multi-disciplin* OR multi-occupation* OR multi-institution* OR multi-organisation* OR multi-organization*
ERIC
DE"Program Evaluation" or "Program Effectiveness" or "Evaluation Methods" or "Evaluation Procedures" or "Formative Evaluation" or DE "Health Services" or "Medical Services" or "Health Facilities" or "Clinics" or "Hospitals" "Health Care Evaluation" or "Medical Care Evaluation" or "Medical Evaluation"andTX "inter-profession*" or "interprofession*" or "inter-disciplin*" or "interdisciplin*" or "cross-disciplin*" or "crossdisciplin*" or "multi-disciplin*" or "multidisciplin*" or "multi-profession*" or "multiprofession*" or "multi-occupation*" or "multioccupation*" or "collab*"
PSYCH INFO
DE "Questionnaires" OR "General Health Questionnaire" or "Surveys" OR "Consumer Surveys" OR "Mail Surveys" OR "Telephone Surveys" or "Quantitative Methods" "Program Effectiveness" OR "Educational Program Effectiveness" OR "Mental Health Program Evaluation" OR "Program Evaluation" OR "Personnel Evaluation" OR "Peer Evaluation" OR "Organizational Effectiveness" OR "Professional Competency" OR "Employee Skills" OR "Job Knowledge" orTX "inter-profession*" or "interprofession*" or "inter-disciplin*" or "interdisciplin*" or "cross-disciplin*" or "crossdisciplin*" or "multi-disciplin*" or "multidisciplin*" or "multi-profession*" or "multiprofession*" or "multi-occupation*" or "multioccupation*" or "collab*" "Continuum of Care" OR "Communities of Practice" OR "Intergroup Dynamics" OR "Interdisciplinary Treatment Approach" OR "Interdisciplinary Research" OR "Multimodal Treatment Approach" OR "Integrated Services" OR "Collaboration" OR "Cooperation" OR "Group Participation"
EMBASE
MP (interprofessional or interdisciplinary or interdisciplinary education or interdisciplinary communication or interdisciplinary research or crossdisciplinary or multidisciplinary or multiprofession* or multi-profession* or interdisciplinary communications or education or collaborat*) or interdisciplinary communication or interprofessional learning or interprofessional education or interdisciplinary education or allied health education or adult education or education or education program or professional practice or patient care or primary health care or health care delivery or team building or cooperation or teamwork or performance measurement system or parameters of measurement and analysis or self-evaluation or course evaluation or evaluation or evaluation research or outcome assessment or measurement/ or questionnaire or course evaluation or "evaluation and follow up" or evaluation research or quantitative analysis

Reviewing Abstracts

A rigorous process was followed for reviewing abstracts. Prior to the review, 30 abstracts were distributed to Quantitative Tools Working Group members for preliminary rating. Discussion following this process provided an opportunity to identify similarities and differences among group members' ratings, and assisted in developing a consistent abstract review process.

Abstracts were selected as relevant if they were empirical articles and described a quantitative tool measuring outcomes of interprofessional education or collaborative practice. Abstracts were excluded if the tool measured general patient or practitioner satisfaction unrelated to collaborative practice, or if the tool was specific to program evaluation (such as measuring learner reactions to interprofessional learning).

The working group reviewers were divided into pairs and each review pair was given a batch of abstracts retrieved from the search (each pair received between 300 and 350 abstracts). Each person in the pair rated the abstracts independently as one of the following:

- Yes - the abstract describes a tool that fits one of the six outcomes outlined in Box 1;
- Possible - the abstract describes a tool that may fit one of the six outcomes in Box 1 and requires further information from the article to confirm;
- No - the abstract does not describe a tool that fits any of the six outcomes in Box 1.

Each member of the pair then reviewed each other's ratings. Disagreements between review pairs were resolved through discussion. If consensus could not be reached, abstracts were distributed to the larger group for discussion and final decision about the rating. Methodological quality assessment was not conducted.

Selection Process and Extracting Tools

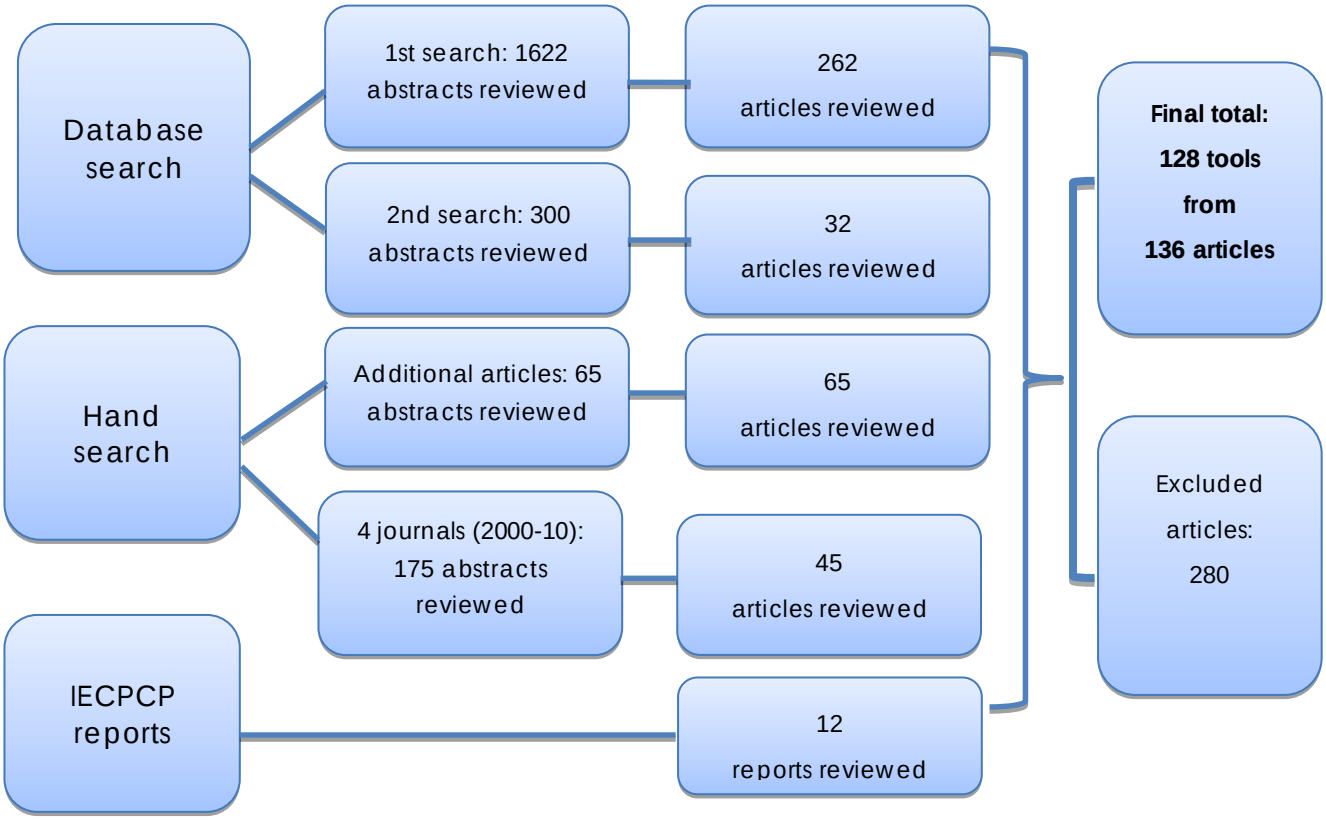
All articles whose abstract was rated as "yes" or "possible" in the steps described above were retrieved. These articles were reviewed, and for the articles determined to be relevant, reviewers extracted information about the tools. Once the initial review pair extracted the data, another pair reviewed the extractions. During this second review, extractions were removed if both pairs agreed the tools did not meet the inclusion criteria.

Any article that contained a tool measuring outcomes pertinent to interprofessional education or collaborative practice was included even if the tool was not psychometrically validated. If a tool had been psychometrically validated, only articles that contained further psychometric information were included in the table. The inventory is intended as a list of tools rather than a comprehensive list of every article that used the tools.

RESULTS

Figure 1 provides the number of items reviewed in our systematic abstract review and article selection processes. The database searches returned 2162 abstracts. The initial search in October 2009 yielded 1622 abstracts for review, with 310 from CINAHL, 245 from Embase, 28 from ERIC, 646 from MEDLINE, 167 from PYSCHinfo, and 315 from Web of Science. Eighty-nine duplicate results were removed. The second MEDLINE search in May 2010 returned 511 abstracts from all databases combined. Once duplicates from the first search were removed, 300 new abstracts were added as possible articles for review. The two hand searches yielded 240 relevant articles (65 articles from the references of previously retrieved articles and 175 from the four hand searched journals). Of the full set of abstracts, 416 articles and reports were retrieved for review. Of these, 136 met the criteria for inclusion and 280 were excluded.

Figure 1: Literature Search and Article Selection Process



A total of 128 quantitative tools were identified as relevant to interprofessional education or collaborative practice. The breakdown of tools by outcome level is shown in Box 3. Since some tools were classified under more than one outcome level, the total number of tools in Box 3 is more than the 128 unique tools.

Box 3: Distribution of Tools Across Outcome Levels

1. Attitudes	64 tools
2. Knowledge, skills, abilities	20 tools
3. Behaviour	34 tools
4. Organizational level	6 tools
5. Patient satisfaction	8 tools
6. Provider satisfaction	14 tools

Table 1 lists the quantitative tools in this inventory. The table lists information derived from the articles: name of the tool, what the tool measures, setting, sample, psychometric properties of the tool (if provided), author's contact information, the population for which the tool is appropriate (prelicensure, postlicensure, or patients), and other salient information. We did not appraise the tools for quality, psychometric rigor, ease of use, or applicability across contexts, as these factors were difficult to ascertain from the articles. Instead, we used an inclusive approach to provide a more complete picture of tools available. Tools were sorted under the six categories of outcomes (outlined in Box 1). This table provides researchers and evaluators with an easily accessible summary of quantitative tools that have been used in interprofessional education or collaborative practice.

TABLE 1 QUANTITATIVE TOOLS MEASURING INTERPROFESSIONAL (IP) EDUCATION OR COLLABORATIVE PRACTICE OUTCOMES

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Outcome Level 1: Attitudes				
Attitude Questionnaire for Shared Learning				
Forman & Nyatanga 2001	2 scales (with 2 subscales each): 1. Benefits and pitfalls of shared learning; 2. Curriculum and social issues in shared learning Unknown number of items with 4-point Likert scales.	University in UK. Students from 4 different programs.	Internal consistency Cronbach's α: Benefits=.70, Pitfalls=.89, Curriculum=.86, Social=.71	Tool included. Contact D.Forman@derby.ac.uk Prelicensure.
Attitudes to Community Care Questionnaire (ACCQ) (also applies to Outcome Level 2)				
Barnes et al 2000	IP[2] attitudes: 6 items with 7-point Likert scales. Includes academic rigour; interpersonal skills; communication skills; leadership; practical skills; breadth of life experience; and professional competence. Role clarity: 7 items with 4-point Likert scales. Professional and team: 10 items with 4-point Likert scales.	University in UK. 71 (for 2 cohorts) post-graduate students from 6 professions.	Internal consistency: Professional and team identification α=.82-.91 Role clarity α=.72 to .82	Tool not included. Contact: j.s.w.carpenter@durham.ac.uk Prelicensure. Tools referenced to: IP attitudes: Haddow and Milne 1995. Role clarity: Rizzo et al 1970. Professional and team: Brown et al 1986.
Attitudes To Health Professionals Questionnaire (AHPQ)				
Lindqvist et al 2005	20 items (one for each profession). 2 components: caring and subservience Visual analogue scale, with anchors at each end	University in UK. 160 students from 6 professional programs.	Internal consistency for revised 20-item questionnaire Cronbach's α =.87 For each component caring α = .93 and subservient α=.58	Tool items included. E-mail: s.lindqvist@uea.ac.uk Prelicensure.

[2] IP is the abbreviation for "interprofessional."

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Agarwal et al 2008	See Lindqvist et al 2005	University in UK. 64 students from 12 professional programs.	See Lindqvist et al 2005.	Tool not included. Contact: gina.agarwal@gmail.com Prelicensure.
Interdisciplinary Healthcare Team Questionnaire (also applies to Outcome Levels 2 and 3)				
Beatty 1987	Attitudes toward health care teams, and perception of curriculum 22 items on attitudes, 15 items on healthcare teams, 12 items on demographics. 49 items with 4-point scale. Final questionnaire had 9 of Snyder's original items, 10 revised items, and 30 new items.	University in US. 836 students from 3 degree programs.	Reliability r=.76	Tool not included. Contact: Patricia Robbins Beatty RN EdD, Assistant Professor, Psychiatric Mental Health Nursing, The University of Texas at Austin, School of Nursing, 1700 Red River, Austin TX 78701 Prelicensure. Tool referenced to Snyder 1981.
Attitudes Towards Healthcare Teams (ATHCT)				
Curran et al 2008 Modified	1 combined scale: quality of care and care decisions, time constraints. 14 items with 5-point Likert scales.	University in Canada. 1179 students from 4 health disciplines.	Cronbach's α =.83	Tool included. Contact: vcurran@mun.ca Prelicensure. Tool referenced to Heinemann, Schmitt & Farrell (2002) who developed a 20-item measure with 6-point scales.
Curran et al 2007a Modified	2 subscales: quality of care, time constraints. 14 items with 5-point Likert scales.	University in Canada. 194 faculty from 4 health disciplines.	Cronbach's α =.88	Tool included. Contact: vcurran@mun.ca Post licensure. Tool referenced to Heinemann, Schmitt & Farrell (2002) who developed a 20-item measure with 6-point scales. The modified ATHT is one of 3 scales administered to faculty.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Curran et al 2010a	2 subscales: quality of care, costs of team care (time constraints). 14 items with 5-point Likert scales.	University in Canada. 137 students from several health disciplines.	Internal consistency Cronbach's α=.83 (from Heinemann 1999)	Tool not included. E-mail: vcurran@mun.ca Prelicensure. Tool referenced to Heinemann et al 1999.
Fulmer et al 2005 Modified	3 subscales: attitudes toward team value, attitudes toward team efficiency, attitudes toward physician shared role. 21 items with 6-point Likert scales.	Universities and teaching hospitals in US. 537 postgraduate students.	As reported in Hyer et al 2000	Tool not included. Contact: terry.fulmer@nyu.edu Prelicensure. Tool referenced Heinemann et al 1991, Heinemann et al 1999, Heinemann & Brown 2002.
Heinemann et al 1999	3 subscales: Quality of care/process, physician centrality and Cost of care 20 items with a 4-point Likert scales.	Community and hospital settings in US. 1018 interdisciplinary geriatric health care teams.	Internal consistency Cronbach's α: Quality of care=.87 Costs of team care=.72 Physician centrality=75 Test-retest correlation: Quality of care, r=.71 (p<.001). Costs of team care r=.42 (p<.05) Physician centrality, r=.36 (p<.05) Construct Validity: Quality of care/process correlated with anomie (r =–.35, p<.001), cohesion (r=.25,p<.001), quality of communication (r=.35, p<.001), quality of external relations (r=.21, p<.001), team effectiveness (r=.39, p<.001). Strength of correlations range from r=.08 to .13.	Tool included. Contact: VA Western New York Healthcare System and University at Buffalo, SUNY. Postlicensure.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Hyer et al 2000	3 subscales: quality of care, costs of team care, physician centrality. 21 items with 6-point Likert scales.	University in US. 913 students in geriatric interdisciplinary team training (GITT).	Overall Cronbach's α=.87 Cronbach's α for subscales: Attitudes toward team value α= .85 Attitudes toward team efficiency α=.76 Attitudes toward physician shared role: α=.75	Tool included. Contact: terry.fulmer@nyu.edu Prelicensure.
Brown & Chamberlin 1996	2 subscales: Quality of care/process and physician centrality 20 items with 5-point Likert scales.	Hospital in US. 200 health professionals from 4 disciplines.	As reported in Heinemann et al 1988, Heinemann et al 1991	Tool not included. Contact: Glenda Brown, Director of Interdisciplinary Team Training Programs, John L. McClellan Memorial Veterans Hospital, 4300 West Seventh Street, Little Rock Arkansas 72205. Postlicensure. Tool referenced to Heinemann et al 1988, Heinemann et al 1991.
Leipzig et al 2002	3 subscales: team value, team efficiency, and physician's shared role on team. 21 items scale with 6-point Likert scales.	University in US. 591 postgraduate students from 20 disciplines.	As reported in Heinemann et al 1999.	Tool not included. Contact: rosanne.leipzig@mssm.edu Prelicensure.
Forchuk, Vingilis et al 2008	3 subscales: team value, team efficiency, and physician's shared role on team. 21 items scale with 6-point Likert scales.	University and practice settings in Canada. 363 students and practitioners.	Not reported.	Tool included Contact: cforchuk@uwo.ca Prelicensure and postlicensure.
Attitudes towards IP Learning in the Academic Setting				
Curran et al 2007a Modified	4 areas: campus resources and support, faculty, students, curriculum/ outcomes supporting IP learning. 13 items with 5-point Likert scales.	University in Canada. 194 faculty from 4 health disciplines.	Cronbach's α=.81.	Tool included. Contact: vcurran@mun.ca Postlicensure. Tool referenced to Gardner et al 2002. The current authors made

Reference	Tool Description	Setting & sample	Psychometrics	Comments
				small wording changes.
Gardner et al 2002 Original	4 areas: campus resources and support, faculty, students, curriculum/ outcomes supporting IP learning. 13 items with a 7–point Likert scales.	Universities in US. 93 deans from 3 disciplines.	Not reported.	Tool included. Contact: gardnerstephanief@uams.edu. Postlicensure (including faculty).
Attitudes Towards Interprofessional Mental Health Care Teams Scale				
Sharpe & Curran 2008 IECPCP	Delivery process and content topics: crisis intervention, assertive community treatment, solution focused communication, cognitive behavioural therapy, states of change and motivational interviewing, building productive relationships, and IP team development. Unknown # items with 5-point Likert scales.	Rural communities in Canada. 127 practitioners from 15 professions.	Not reported.	Tool not included. Contact: vcurran@mun.ca Prelicensure. Tool referenced to Heinemann et al 1999.
Attitudes towards teamwork questionnaire (also applies to Outcome Levels 2 and 3)				
Wolf 1999	Subscales: Orientation toward team problem-solving: 10 items rated on 6-point Likert scale Problem solving confidence: 10 items rated on 6-point Likert scale Team preparedness: 10 items rated on 6-point Likert scale Attitude towards interdisciplinary team: 14 items rated on 6-point Likert scale Self-efficacy: 10 items with 5-point Likert scales.	University in US. 410 alumni from 8 allied health disciplines.	Cronbach's α for 5 subscales: Orientation toward team problem-solving=.80, Problem solving confidence=.71, Team preparedness=.68, Attitude towards interdisciplinary team=.89, Self-efficacy=.92	Tool not included. Contact: wolf.4@osu.edu Prelicensure.
Bigg's Structure of the Observed Learning Outcomes (SOLO)				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Nisbet et al 2008	Knowledge of others' roles. 8 items with 5-point Likert scales.	Hospital in Australia. 18 students from 7 disciplines.	Not reported.	Tool not included. Contact: gnisbet@chs.usyd.edu.au Prelicensure.
Clinical Practice Environment Assessment Tool (CPEAT)				
Dougherty & Choi 2008	8 subscales: Values, decision-making support, workload, resources, communication with leaders, team collaboration, team conflict and professional practice 108-116 items with Likert scales.	Inpatient rehabilitation setting in Canada. 149 staff from 4 professions.	Not reported.	Tool not included. Contact: Professional Practice at VCH-Vancouver Acute (www.in-bc.ca) Postlicensure. Use of the CPEAT as pre-post assessment tool was time-consuming in administration and analysis, and valid conclusions were contingent on higher sample rates than achieved in this setting.
Collaboration & Satisfaction about Care Decisions (CSCD) (also applies to Outcome Level 2)				
Forchuk et al 2008	Decisions about care for patients made by an interdisciplinary team of care providers. 8 items with 7-point Likert scales.	University and practice settings in Canada. 363 undergraduate students from different health disciplines.	Not reported.	Tool included. Contact: cforchuk@uwo.ca Postlicensure. Questionnaire referenced to Baggs 1994.
Collective Capability Survey				
Soubhi et al 2008	Collective capability: experiences working with others in team (e.g. trust, respect, sharing, communication) 14 questions with 5-point rating scales.	Canada. Setting and sample size not reported.	Content validity (tool designed by expert panel) Internal consistency (ranging from α= .81 to α=.52).	Tool available from authors. Contact: Hassan.Soubhi@USherbrooke.ca Unknown target audience. Unpublished IECPCP project.
Emergency Department Staff Attitudes and Opinion Survey				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Morey et al 2002	Staff attitudes towards teamwork concepts (e.g., assigning roles and responsibilities in clinical situations) and perception of support from senior managers and peers for incorporating teamwork principles into clinical tasks. 15 items with 7-point response scales.	Hospital emergency department in US. Experimental group=684 staff. Control group=374 staff.	Internal consistency Cronbach's α=.95.	Tool not included. Contact: John C. Morey, PhD, Senior Research Psychologist, Crew Performance Group, Dynamics Research Corporation, 60 Frontage Road, Andover, MA 01810, USA. Postlicensure.
Fox's Change Readiness Inventory (Adaptation)				
Murray et al 2008 Modified	4 areas: readiness to work in collaborative group practice settings, forces that drive change, physicians' attitudes toward making a change, image of change, and perceived barriers to making changes in practices. Unknown number of open-ended questions.	Healthcare settings in Canada. 60 professionals from 4 disciplines.	Not reported.	Tool not included. Contact: murrays@axdevgroup.com Postlicensure. Tool referenced to Fox's Change Readiness Inventory. No other information provided.
Generic Role Perception Questionnaire (GRPQ)				
MacKay 2004	Roles of other professions. 31 items with 10-point scale.	University in UK. 43 students from 9 disciplines	Test re-test reliability: correlation coefficient r= 0.7. Content validity verified through consultation with sample group.	Tool included. E-mail s.mackay@salford.ac.uk Prelicensure.
Group Environment Scale (GES)				
Salter & Junco 2007	10 subscales: Cohesion, leader support, expressiveness, independence, task orientation, self-discovery, anger and aggression, order and organization, leader control, innovation. 90 items with true/false ratings (9 per subscale).	College in US. 191 students.	Internal consistencies α=.69-.86. Test-retest reliability α=.69-.83. (from Moos 1994a - Group Environment Scale manual). From this study, internal consistency Cronbach's α=.07-.49.	Tool not included. Contact: Daniel W. Salter, Walden University, 1-866-492-5336 Prelicensure. Tool referenced to Moos 1994a. Group Environment Scale manual (3rd edition). Palo Alto, CA:CPP.
Health Care Stereotype scale				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Hind et al 2003	Positive and negative stereotypical traits: autostereotype and heterostereotype. Unknown number of items with 7-point Likert scales.	University in UK. 933 students from various health disciplines.	Validity: Low correlation between stereotyping and professional identity scales (r=0.21, p=.000). Positive correlation between autostereotype, heterostereotype and strength of personal identity (r=68, p=.000). Positive correlation between RIPLS and autostereotype (r=.12, p=.01). Positive correlation between RIPLS and heterostereotypes (r=.172, p=.001)	Tool not included. Contact: mhind@bournemouth.ac.uk Prelicensure. Tool referenced to Carpenter 1995.
Healthcare Team Vitality Instrument (HTVI) (also applies to Outcome Level 4)				
Upenieks et al 2010	4 factors: support structures; engagement and empowerment; patient care transitions, team communication. 18 items with 5-point Likert scales.	Hospitals in US. 439 healthcare providers.	Factor analysis accounted for 58% of variation.	Tool included. Contact: vupenieks@ucla.edu Postlicensure.
Index for Interdisciplinary Collaboration (IIC)				
Bronstein 2002	5 subscales: Interdependence, newly created professional activities, flexibility, collective ownership of goals, reflection on process. 49 items with 5-point Likert scales. 42 items also found to be sufficient and reliable.	462 social workers across US.	Test-retest reliability r=.824 (p< .01) Internal consistency: Cronbach's α=.92 for 49 items, α = .92 for 42 items. Internal consistency of 5 subscales: Cronbach's α=.56-.82 for 49 items. Cronbach's α=.62-.82 for 42 items Construct validity: No significant correlations between demographics and scores. Convergent construct validity: Significant correlations between scores and professional affiliation, agency organization and structural characteristics, personal relationships among collaborators, prior history of collaboration.	Tool included. Contact: lbronst@binghamton.edu Postlicensure. 42-item scale shows slightly better internal consistency than 49-item scale.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Parker-Oliver et al 2007 Modified	4 subscales: Interdependence and flexibility, newly created professional activities, collective ownership of goals, reflection on process. 42 items with 5-point Likert scales.	Hospices in US. 95 staff members from 11 disciplines.	Internal consistency: Cronbach's α: Whole scale=.93. Interdependence=.87, Flexibility=.87, Newly created activities=.77, Collective ownership of goals=.80, Reflection on process=.79.	Tool included. Contact: oliverdr@missouri.edu Postlicensure. Authors modified wording to suit other professions (original for social workers only).
Index of Interprofessional Team Collaboration for Expanded School Mental Health (IITC-ESMH) (also applies to Outcome Level 4)				
Mellin et al 2010	Four subscales: reflection on process, professional flexibility, newly created professional activities, and role interdependence. 26-items with 5-point Likert scales.	Schools in US. 436 members of IP health care teams.	Internal consistency Cronbach's α: Reflection on Process, α =.91, Professional Flexibility α =.91, Newly Created Professional Activities α = .84, Role Interdependence α=.80 (using CFA).	Tool included. Contact: eam20@psu.edu Pre licensure.
Index of Work Satisfaction (IWS)				
Amos et al 2005	6 areas of work satisfaction: pay, autonomy, task requirements, organizational policies, interaction (nurse to nurse and nurse to physician) and professional status. 44 items with 7-point Likert scales.	Hospital in US. 44 nursing staff.	Cronbach's α of overall scale =.91 Pay=.84, Professional status=.77, Autonomy=.76, Organizational policies=.80, Task requirements=.64, Nurse-to-nurse interaction=.70, Nurse-to-physician interaction=.80. Construct validity for all subscales significantly related to overall scale (p<.0001).	Tool not included. Contact: P. L. Stamps Chicago, IL, Health Administration Press. Postlicensure. Only one subscale (interaction between nurse and physician) relevant to collaboration.
Integrated Care Scale				
Boumans et al 2008	3 subscales: home-like environment, demand-oriented working method, and integration of care and services by different providers. 37 items with 5-point Likert scales.	Nursing homes in Netherlands. 124 caregivers.	Integration subscale Cronbach's α=.70.	Tool not included. Contact: n.boumans@beoz.unimaas.nl Postlicensure. Only one subscale (Integration) related to collaborative practice.
Interdisciplinary Education Perception Scale (IEPS) & IEPS modified				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Cameron et al 2009	1 area: interdisciplinary education perceptions. 18 items with 5-point Likert scales.	University in Canada. 847students pre-survey; 649 post-survey from 9 disciplines.	Not reported.	Tool not included. Contact: aj.cameron@utoronto.ca Prelicensure. Surveys are available from author.
Furze et al 2008	Perceptions of other health professions. 17 items with 5-point Likert scales.	University in US. 64 students from 4 professions	Not reported.	Tool not included. Contact: jfurze@creighton.edu Prelicensure. Tool referenced to Luecht et al 1990 and Hawk et al 2002.
Goellen et al 2006	4 subscales: competence and autonomy, perceived need for cooperation, perception of actual cooperation, understanding others' value. 18 items with 6-point Likert scales.	University in Belgium. 177 students from 3 professions	Not reported.	Tool not included. Contact: Guido Goelen congnrg@az.vub.ac.be Prelicensure. Tool referenced to Luecht et al 1990. Tool translated into Dutch.
Hawk et al 2002	4 subscales: competence and autonomy, perceived need for cooperation, perception of actual cooperation, understanding others' value. 18 items with 6-point Likert scales.	Geriatric educational institutions in US. 588 students from 8 professions	Not reported.	Tool included. Contact: hawk_c@palmer.edu Prelicensure. Tool referenced to Luecht et al 1990.
Hayward et al 2005	1 area: perceptions of interdisciplinary practice. 18 items with 5-point Likert scales.	University in USA. 102 students from 8 disciplines.	Not reported.	Tool included. Contact: summkare@isu.edu Prelicensure. Tool referenced to Hayward et al 1996.
McFadyen et al 2007	Revised IEPS: competency and autonomy; perceived need for cooperation; and perception of actual cooperation.	University in UK. 65 member of a	Revised version internal consistency of each sub-scale: Competency & autonomy α =.83-.82;	Tool included. Contact: akmf@gcal.ac.uk

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Modified	12 items with 6-point Likert scales.	professional group. 308 students from 8 health and social care programs.	Perceived need for cooperation α=.38-.40, Perception of actual cooperation α =.85-.83 Total Scale (12 items): α =.87-.88 Test-retest reliability of 3 sub-scales: ICC values=.58, .60 and 57 respectively.	Prelicensure.
Neill et al 2007	4 subscales: competence and autonomy, need for cooperation, actual cooperation, understanding others' value. 18 items with 6-point Likert scales.	University in US. 114 students from multiple health-related disciplines	Not reported.	Tool included. Contact: neilmark@isu.edu Prelicensure. Tool referenced to Luecht et al 1990.
Mu et al 2004 Modified	1 area: perceptions of allied professions. 18 items with 5-point Likert scales.	University in US. 111 students from 3 disciplines.	Not reported.	Tool not included. Contact: kmu@creighton.edu Prelicensure. Tool referenced to Luecht et al 1990.
Luecht et al 1990 Original	4 subscales: competency and autonomy, needs for cooperation, perception of actual cooperation, understanding values and contributions of others. 18 items with 6-point Likert scales.	University in US. 143 students from allied health disciplines.	Cronbach's α of overall scale =.87 competency and autonomy=.82, needs for cooperation=.56, perception of actual cooperation=.54, understanding values of others=.51	Tool included. Contact: Richard M. Luecht, American College Testing, STAR Department, Iowa City, IOWA 52243.
Interdisciplinary Team Performance Scale (ITPS) (also applies to Outcome Level 2)				
Brajtman et al 2008	6 subscales: leadership, communication, coordination, conflict management, team cohesion, perceived unit effectiveness. 59 items with 5-point Likert scales.	Non-acute hospital in Canada. 10 members of IP palliative care team.	Reliability and face content and construct validity as reported by Temkin-Greener et al 2004.	Tool not included. Contact: brajtman@uottawa.ca Postlicensure.
Forchuk et al 2008 Modified	4 subscales leadership, organization, communication, and conflict. 49 items with 5-point Likert scales.	University and practice settings in Canada. 363 students.	Not reported.	Tool included. Contact: cforchuk@uwo.ca Tool referenced to Temkin-Greener et al 2004.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
				Prelicensure.
Temkin-Greener et al 2004	6 subscales: leadership, communication, coordination, conflict management, team cohesion, perceived unit effectiveness. 59 items with 5-point Likert scales.	Long-term care in US. 1220 team members from 12 disciplines.	For all subscales: Paraprofessionals : Cronbach's α=.73-.87, Professionals :Cronbach's α=.78-.91, Team effectiveness : α=.89, Coordination and conflict management α=.76 Face & Content validity: reviewed by an expert panel. Construct validity: Correlations: Leadership, communication, coordination, and conflict management subscales are positive and significant (p<0.001) predictors of team cohesion and team effectiveness.	Tool included. Contact: Helena_Greener@urmc.rochester.edu. Postlicensure. Adapted from instrument for intensive care units.
Interdisciplinary Weekly Team Inventory				
Curran et al 2005	2 areas: Attitudes towards teams and teamwork; formation of teamwork attitudes and values. 17 items rated with 5-point semantic-differential scales.	University in Canada. 133 students from 3 disciplines.	Not reported.	Partial tool included. Contact: vcurran@mun.ca Prelicensure. Tool referenced to Clark 1994.
Interprofessional Interest Survey (IIS)				
Forchuk et al 2008	Measures IP interest and attitudes. 3 items with 5-point Likert scales.	University in Canada. 363 undergraduate students, 262 graduate students, 17 Faculty members from several health program disciplines.	Not reported.	Tool included. Contact: cforchuk@uwo.ca Prelicensure and postlicensure.
Interprofessional Perception Scale (IPS)				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Forchuk et al 2008	Learning about professionals from other disciplines. 15 items with true/false response.	University in Canada. 363 undergraduate students, 262 graduate students, 17 Faculty members from several health program disciplines.	Not reported.	Tool included. Contact: cforchuk@uwo.ca Prelicensure and postlicensure. Tool referenced to Golin & Ducanis 1981.
Interprofessional Socialization & Valuing Scale (ISVS)				
King et al. 2010	3 subscales: ability to work with others, value in working with others, comfort in working with others. 24 items with 7-point Likert scales.	University in Canada. 125 students.	Internal consistency Cronbach's α: 3 subscales =.79-.89. Whole scale=.90.	Tool included. Contact: gking27@uwo.ca Prelicensure.
Jefferson Scale of Attitudes toward Physician-Nurse Collaboration				
Hojat et al 1999a Modified	Physician-nurse interaction with 5 subscales: authority, autonomy, responsibility for patient monitoring, collaborative decision-making, and role expectations. 20 items with 4-point Likert scales.	University in US. 294 undergrads from 2 professions.	Internal consistency Cronbach's α: Nursing students=.85, Medical students=.84, Combined=.85. Item-total score correlations for combined group r =.40-.65, and median correlation r =.61. Validity: factor analysis conducted.	Tool included. Contact: mohammadreza.hojat@jefferson.edu Prelicensure. Tool referenced to Hojat 1985.
Garber et al 2009 Modified	4 subscales: shared education, caring vs curing, nurse autonomy, and physician authority. 15 items with 4-point Likert scales.	Hospital in US. 497 staff from 2 disciplines.	Internal consistency: Cronbach's α: Medical students=.84, Nursing students=.85, Shared education: α=.84, Caring vs curing: α=.62 Nurse autonomy: α=.70, Physician authority: α=.49, PCA resulted in 6 factors accounting for 58% of total variance.	Tool not included. Contact: E-mail: jgarber@jchs.edu or jgarber@jetbroadband.com Postlicensure.
Hansson et al 2010	Physician-nurse interaction with 5 subscales: authority, autonomy, responsibility for patient monitoring, collaborative decision-making, and role expectations.	Universities in Sweden. 261 students.	Not reported.	Tool not included. Contact: anders.hansson@vgregion.se Prelicensure.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
	20 items with 4-point Likert scales.			
Ward et al 2008 Modified	Physician-nurse interaction with 5 subscales: authority, autonomy, responsibility for patient monitoring, collaborative decision-making, and role expectations. 15 items with 4-point Likert scales.	University in USA. 333 nursing students.	Internal consistency coefficient α =.77. Validity: item total score correlations were all positive and statistically significant (p=.05), ranging from a low of r=.40 to a high of r=.62. Median item-total score correlation r=.52.	Tool not included. Contact: julia.ward@jefferson.edu Prelicensure. Tool referenced to Hojat & Herman 1985.
Medication Use Processes Matrix (MUPM) (also applies to Outcome Level 3)				
Farrell et al 2008	Measures collaborative care in family practices among physician, pharmacist, nurse, receptionist, and community pharmacist. 5 subscales: diagnostic & prescribing, monitoring, administrative & documentation, education, medication review. 22 processes in total for the 5 subscales with 5-point scale for levels of responsibility (1=lead role; 2=shared lead role; 3=supportive role–major; 4=supportive role–minor; 5=no role).	Family practice clinics in Canada. 91 participants from 5 professions.	Internal consistency Cronbach's α: Overall tool=.97, 5 subscales: Diagnosis & prescribing=.96, Monitoring=.81, Administrative/documentation=.84, Education=.85, Medication review=.89 Test-retest reliability: intra-class coefficient (ICC >.80). Content validity and construct validity tested and reported.	Tool included. Contact: bfarrell@bruyere.org Postlicensure.
Multidisciplinary collaboration instrument (MDC) (also applies to Outcome Level 3)				
Caroll 1999	Measures collaboration among health care providers. 4 subscales: collaboration in general, patient care process, communication, and teamwork. 18 vignettes: 72 items with 5-point Likert scales (4 questions per vignette).	Hospital in US. 202 hospital staff from various disciplines.	Internal consistency Cronbach's α: All subscales across vignettes=.67–.81 Within vignettes=.42–.98 Face validity done and reported. Construct validity (convergent & discriminant): General collaboration=.80 Collaboration in patient care process=.72 Collaboration in communication=.67 Collaboration in teamwork=.81.	Tool not included. Contact: tcarroll@son1.nur.uth.tmc,edu. Postlicensure.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Nursing role perception questionnaire (NRPQ)				
MacKay 2004	Nursing role. 7 subscales: breadth of professional outlook, degree of patient interaction, projected professional image, perception of own professional status, possess skills for a wide professional remit, level of rapport with patients and colleagues, degree of professional interdependence. 31 items with 10 point rating scales.	University in UK. 198 students from 6 professions	Internal consistency Cronbach's α (using PC analysis): Entire scale=.74 Breadth of professional outlook=.77, Degree of patient interaction=.71, Projected professional image=.72, Perception of own professional status= -.47, Possess skills for a wide professional remit=.60, Level of rapport with patients and colleagues=.34, Degree of professional interdependence =.47.	Tool included. Contact: s.mackay@salford.ac.uk Prelicensure.
Observation Guide for Student Team Function				
McFetridge-Durdle & Mann 2008	3 subscales: basic information (demographics, location, purpose of meeting); teaching and learning (learning environment, preceptor functions and style, IP learning); teamwork and leadership (phase of group development, power distribution, challenges, student attitudes, socialization).	University in Canada. 29 students and preceptors from 5 faculties.	Not reported.	Tool included. Contact: Jmcfetridged@mun.ca Prelicensure.
Operating Room Management Attitudes Questionnaire (ORMAQ)				
Helmreich & Davies 1996	5 subscales: leadership-structure, confidence-assertion, team roles, information sharing, stress recognition. Scores transformed to 1-100. Number of items and scale not provided.	Hospital operating rooms in US. Compilation of previous studies. No data on sample sizes.	Internal consistency Cronbach's α: 5 subscales=.55-.85.	Tool not included. Contact: not provided. Postlicensure.
Wallin et al 2007	Attitudes toward safe teamwork. 18 items with 5-point Likert scales.	University in Sweden. 15 medical students.	Not reported.	Tool included. Contact: carl-johan.wallin@ki.se Prelicensure.
Patient-focused Rehabilitation Team Cohesiveness				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Smits et al 2003	3 scales: effort, teamwork, effectiveness. 20 items with 7-point Likert scales.	Veterans Administration Hospitals in US. 650 rehabilitation team members.	Internal consistency Cronbach's α=.96.	Tool not included. Contact: j.falconer@northwestern.edu Postlicensure.
Perceptions of Effective IP Teams				
Sharpe & Curran 2008 IECPCP	Students' ratings of their perception and understanding of IP teamwork. The scale has been adapted from Clark (1994). 17 items with 5-point Likert scales.	University in Canada. 300+ practitioners from various programs & disciplines.	Not reported.	Tool not included. Contact: vcurran@mun.ca Postlicensure. Tool referenced to Clark 1994.
Curran et al 2010a	Ability to function as part of an effective team 17 items with 5-point scale (1=poor to 5=excellent).	University in Canada. 137 postgraduate students and practitioners from 4 professions.	Internal consistency reliability Cronbach's α=.95.	Tool not included Contact: vcurran@mun.ca Prelicensure and postlicensure. Tool referenced to Heinemann & Brown 2002.
Perception of Interprofessional Collaboration Model Questionnaire (PINCOM-Q)				
Odegard & Strype 2009	IP collaboration. 12 subscales: motivation, role expectations, personality style, professional power, group leadership, communication, coping, social support, organizational culture, organizational aims, organizational domain, organizational environment. 48 Items with 7-point Likert scales.	Schools, psychiatric clinics, and child protection centers in Norway. 157 professionals from 7 disciplines.	Internal consistency Cronbach's α: Total scale=.91 Individual level=.77 Group level=.88 Organizational level=.75.	Tool not included. Contact: atle.odegard@hiMolde.no Postlicensure.
Professional Identity Scale				
Hind et al 2003	Strength of students' professional identity regarding the readiness for IP learning. 10 items with 5-point Likert scales.	University in UK. 933 students from various health disciplines.	Internal consistency Cronbach's α: Professional identity=.76. Validity: low correlation between stereotyping and professional identity scales (r=.219, p=.000). Strong positive correlation between autostereotype and heterostereotype tool and strength of personal identity	Tool not included. Contact: mhind@bournermouth.ac.uk Prelicensure. Tool referenced to Brown et al 1986.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
			scale (r=.68, p=.000) .	
Provider judgement of family participation in care meetings (also applies to Outcome Level 6)				
Dijkstra 2007	1 area: familial expectations, influence, and participation in care. 11 items with yes/no responses.	Nursing homes in Netherlands. 15 nursing home staff.	Not reported.	Tool included. Contact: ate.dijkstra@znb.nl Postlicensure.
Provider perception about interprofessional collaboration				
Larkin & Callaghan 2005	Mental health professionals' perceptions of IP working. 19 items with yes/no responses. 1 item with 5-point Likert scales.	Community mental health setting in UK. 165 mental health staff.	Face and content validity reported. Validity: No statistically significant relationship between presence of team operational policy (r = 70 p <.05), presence of joint policy(r= 70.p<.05) and professionals' perceptions of IP working in teams. Correlation between presence of joint documentation policy (r= 70, p <.05) and professionals' perceptions of IP working in teams. Correlation between joint risk policy (r= 70, p <.05), joint supervision policy (r= 70., d p <.05) and professionals' perceptions of IP working in teams.	Tool not included Contact: Patrick@city.ac.uk Postlicensure.
Readiness for Interprofessional Learning Scale (RIPLS)				
Parsell & Bligh 1999 Original	3 subscales: teamwork & collaboration, negative& positive professional identity, roles & responsibilities. 19 items with 5-point Likert scales.	University in UK. 120 students from 8 health disciplines.	Factor analysis Cronbach's α : Total scales=.90 Teamwork & collaboration range=.44-.79 Negative& positive professional identity ranged= -.41 -.78 Roles & responsibilities ranged=.49-.63.	Tool included. Contact: Glennys Parsell, Department of Health Care Education, The University of Liverpool, 3rd Floor University Clinical Department, Duncan Building, Liverpool L69 3GA, UK. Tel: 0151 706 4293. Fax: 0151 706 5876. Email: petal@liverpool.ac.uk

Reference	Tool Description	Setting & sample	Psychometrics	Comments
				Prelicensure. Tool referenced to Parsell & Bligh 1999.
McFadyen et al 2005 Modified	4 subscales: teamwork & collaboration, negative professional identity, positive professional identity, roles & responsibilities. 19 items with 5-point Likert scales.	University in Canada. 308 students from 8 health disciplines.	Cronbach's α for Time 1/Time 2: Teamwork & collaboration=.79/.88 Negative professional identity =.60/.76, Positive professional identity=-.76/.81, Roles & responsibilities=.40/.43, Total scale=.84/.89.	Tool included. Contact: akmf@gcal.ac Prelicensure. Tool referenced to Parsell & Bligh 1999.
Curran et al 2008 Modified	1 combined scale about the benefits of IP learning: positive thinking and respect for other healthcare professionals, role understanding, improved communication among providers and with patients, importance of team skills. 15 items with 5-point Likert scales.	University in Canada. 1179 students from 4 health disciplines.	Internal consistency Cronbach's α =.91. Factor analysis done.	Tool included. Contact: vcurran@mun.ca Prelicensure. Tool referenced to Parsell & Bligh (1999). The modified RIPLS is one of 2 scales administered to students.
El-Zubeir et al 2006 Modified	3 subscales: teamwork and collaboration, professional identity, patient-centredness 20 items with 5- point Likert scales.	University in United Arab Emirates. 178 students from 2 professions	Internal consistency Cronbach's α: Teamwork and collaboration=.86, Professional identity=.80, Patient-centredness=.80.	Tool included. Contact: Margaret.elzubeir@pms.ac.uk Prelicensure. Tool referenced to Parsell & Bligh 1999.
McFadyen et al 2006 Modified	4 subscales: teamwork & collaboration, negative professional identity, positive professional identity, roles & responsibilities. 19 items with 5-point Likert scales.	University in UK. 65 students from 1 discipline.	Intra-class correlation coefficient Cronbach's α: Total scale=.60, Teamwork & collaboration=.71, Negative professional identity=.38, Positive professional identity=.61, Roles & responsibilities=.62 Weighted kappa for 19 items ranged from .220-.551 (fair -moderate)	Tool included. Contact: akmf@gcal.ac.uk Prelicensure. Tool referenced to Parsell & Bligh (1999).

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Hind et al 2003	3 subscales: teamwork & collaboration, negative & positive professional identity, roles & responsibilities. 19 items with 5-point Likert scales.	University in UK. 933 students from various health disciplines.	Internal consistency Cronbach's α=.80 Validity: overall scores for two groups significantly different (42.9 vs. 38.7, df = 174, p <.001) Low positive correlation between RIPLS and autostereotypes (r=0.125, p=0.01). Low positive correlation between RIPLS and heterostereotypes (r=0.172, p=0.001)	Tool not included. Contact: mhind@bournermouth.ac.uk Prelicensure. Tool referenced to Parsell & Bligh 1999. Psychometrics referenced to Brown et al, 1986; Carpenter, 1995; Barnes et al, 2000.
Cooper et al 2005	3 subscales: teamwork & collaboration, negative& positive professional identity, roles & responsibilities. 19 items with 5-point Likert rating scales.	University in UK. 318 students from 4 disciplines	As reported by Parsell and Bligh (1999).	Tool not included. Contact: hcoop@liv.ac.uk Prelicensure. Tool referenced to Parsell & Bligh 1999.
Morrison & Jenkins 2007	3 subscales: teamwork & collaboration, negative& positive professional identity, roles & responsibilities. 19 items with 5-point Likert scales.	University in UK. 261 students from 1 discipline.	Internal consistency Cronbach's α: Total scale=.90 Teamwork & collaboration=.88 Professional identity=.63 Roles & responsibilities=.32.	Tool not included. Contact: s.morison@qub.ac.uk Prelicensure. Tool referenced to Parsell & Bligh 1999.
Priest et al 2008 Modified	3 subscales: teamwork & collaboration, negative& positive professional identity, roles & responsibilities. 20 items with 5-point Likert scales.	Universities in UK. 36 students from 2 disciplines.	Not reported	Tool included. Contact: h.m.priest@staffs.ac.uk Prelicensure. Tool referenced to Parsell & Bligh 1999.
Reid et al 2006 Modified	3 subscales: teamwork & collaboration, negative& positive professional identity, roles & responsibilities, plus 4 demographic questions. 29 items with 5-point Likert scales.	Primary care organization in UK. 546 professionals from 4 disciplines.	PCA retained 3 factors explaining 44.3% of variance with 23 items. Internal consistency Cronbach's α =.76 Face and content validity reported.	Tool included. Contact: k.allstaff@chs.dundee.ac.uk Postlicensure. Tool referenced to Parsell & Bligh

Reference	Tool Description	Setting & sample	Psychometrics	Comments
				1999.
Mattick & Bligh 2005	3 subscales: teamwork & collaboration, negative& positive professional identity, roles & responsibilities. 19 items with 5-point Likert rating scales.	University, hospitals and other organizations in UK. 45 researchers from several disciplines.	Not reported	Tool included. Contact: karen.mattick@pms.ac.uk Prelicensure. Tool referenced to Parsell & Bligh 1999.
Curran et al 2007a Modified	1 combined scale about the benefits of IP learning: positive thinking and respect for other healthcare professionals, role understanding, improved communication among providers and with patients, importance of team skills. 15 items with 5-point Likert scales.	University in Canada. 194 faculty from 4 health disciplines.	Internal consistency Cronbach's α =.92	Tool included. Contact: vcurran@mun.ca. Postlicensure. Tool referenced to Attitudes towards Interprofessional Learning developed by Parsell & Bligh (1999). The modified RIPLS is one of 3 scales administered to faculty.
Role Perception Checklist				
Curran et al 2005	Checklist of 14 roles held by other professions. 14 yes/no items.	University in Canada. 133 students from 3 disciplines.	Not reported.	Partial tool included. Contact : vcurran@mun.ca Prelicensure. Tool referenced to Bowmer et al (unpublished). Contact rlaw@mun.ca
Self-Efficacy for Interprofessional Experiential Learning (SEIEL)				
McFetridge-Durdle & Mann 2008	Confidence in student's ability to carry out their roles as students for IP learning. 16 items with 10-point Likert scales.	University in Canada. 62 students from 5 faculties.	Not reported.	Tool included. Contact: Jmcfetridged@mun.ca, Karen.Mann@dal.ca Prelicensure.
Self-Efficacy for Interprofessional Experiential Learning (SEIEL) for Integrative Preceptors				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
McFetridge-Durdle & Mann 2008	Confidence in integrative preceptor's ability to carry out their role 15 items on a 10-point Likert scales.	University in Canada. 12 integrative preceptors (clinicians) from 5 faculties.	Not reported.	Tool included. Contact: Jmcfetridged@mun.ca, Karen.Mann@dal.ca Postlicensure.
Self-Efficacy for Interprofessional Experiential Learning (SEIEL) for Discipline Preceptors				
McFetridge-Durdle & Mann 2008	Confidence in integrative preceptor's ability to carry out their role 15 items on a 10-point Likert scales.	University in Canada. 12 integrative preceptors (clinicians) from 5 faculties.	Not reported.	Tool included. Contact: Jmcfetridged@mun.ca, Karen.Mann@dal.ca Postlicensure.
Staff Communication Evaluation Tool				
Amos et al 2005	8 subscales: honest communication; recognition, respect & trust in peers; problem solving towards goals of agency; giving constructive feedback; identification of conflict; role accountability; sharing knowledge; support for team, system & organizational goals. 25 items with 5-point Likert scales.	Hospital in US. 44 nursing staff (including assistants, technicians).	Internal consistency Cronbach's α=.96.	Tool not included. Contact: Jie Hu: jie_hu@uncg.edu Postlicensure.
Staff Perception of Specialty Care				
Naar-King et al 2002	1 area: satisfaction (with program, with team/extent of collaboration). 13 items with 5-point Likert scales.	Hospital in US. 67 staff from 5 disciplines.	Validity reported in Naar-King (2001). Internal reliability Cronbach's α: Satisfaction with program=.88 Satisfaction with team/extent of collaboration=.80	Tool included. Contact: snaarkin@med.wayne.edu Postlicensure.
"StudData" Questionnaire measuring perceptions of Interprofessionalism				
Almas & Barr 2008	IP education. 10 items with 6-point Likert scales.	University in Norway. 843 students from 5 professions.	Not reported. Comparative analysis done.	Tool included. Contact: synnove.hofsetalmas@hials.no Prelicensure.
Student Attitude Questionnaire				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Krause & Popovich 1996 Original	2 scales: group interactions and personal preparedness for course among students. 10 items with 5-point Likert scales.	University in US. 83 students from a pharmacy course.	Not reported.	Tool included. Contact: Krause and Popovich, Purdue University, W. Lafayette, IN. This tool is used for self/peer assessments by students in a course.
Brown et al 2008 Modified	2 subscales: IP education, feelings about self & peer assessments. 20 items with 5-point Likert scales.	University in US. 73 students from 5 health disciplines.	Not reported.	Tool included. Contact: bethanne.brown@uc..edu Pre-licensure learners. Tool referenced to Krause et al 1996.
Student Perception Survey (also applies to Outcome Level 2)				
Morrison et al 2009	3 subscales: attitudes toward teamwork with other professions. 20 items with 4-point Likert scales.	Universities in Australia and US. 281 students from 1 discipline.	internal consistency Cronbach's α: Attitudes=.60, Knowledge=.68, Skill =.68 Content and face validity reported.	Tool included. Contact: susan.morrison@jcu.edu.au Prelicensure.
System for the Multiple Level Observation of Groups (SYMLOG)				
Farrell et al 2001	3 subscales: prominence, sociability, and task orientation. Each scale has nine positive and nine negative items. 26 items with 3-point Likert scales.	Veteran Affairs medical centers in US. 1018 from 111 interdisciplinary health care teams.	Gulliksen reliability (GR): Prominence α=.64 Sociability α=.96 Task α=.72. (Bales & Cohen, 1979)	Tool not included. Contact: ofarrell@acsu.buffalo.edu Postlicensure. Tool referenced to Bales & Cohen 1979.
Cashman et al 2004	3 subscales: prominence, sociability, and task orientation. Each scale has nine positive and nine negative items. 26 items with 3-point Likert scales.	Primary care setting in US. 3 teams of practitioners.	As reported in Farrell et al 2001.	Tool included. E-mail: suzanne.cashman@umassmed.edu Postlicensure. Tool referenced to Bales & Cohen

Reference	Tool Description	Setting & sample	Psychometrics	Comments
				1979. Used in 12 languages in 40+ countries.
Team Anomie Scale (also applies to Outcome Levels 2 and 3)				
Farrell et al 2001	Confusion or uncertainty about team members' roles, team's norms and goals. 23-item with 6-point Likert scales.	Veteran Affairs medical centers in US. 1018 from 111 interdisciplinary health care teams.	Internal consistency Cronbach's α=.90.	Tool not included. Contact: ofarrell@acsu.buffalo.edu Postlicensure. Tool referenced to Farrell et al 1996.
Team Decision Making Questionnaire (TDMQ)				
Batorowicz & Shepherd 2008	4 subscales: decision-making, team support, learning, and developing quality services. 19 items with 7-point rating scale (1=not at all, 7=to a vast extent).	Augmentative and Alternative Communication clinical practices. 102 practitioners from 3 communication professions.	ICC/ Internal consistency Cronbach's α: Decision Making=.77/=.90, Team Support=.94/.91, Developing Quality Services=74/.88, Learning= .52/=.83. Overall: Cronbach's α=.96.	Tool included. Contact: tracy.shepherd@tvcc.on.ca Postlicensure.
Team Reflective Exercise				
McFetridge-Durdle J & Mann K, 2008	How team has worked together since last team meeting. 10 items with 5-point rating scale (1=little to not at all, 5=very well).	University in Canada. 12 integrative preceptors, 17 discipline preceptors and 62 students from 5 faculties.	Not reported.	Tool included. Contact: Jmcfetridged@mun.ca, Karen.Mann@dal.ca Prelicensure and postlicensure.
Teamwork Assessment Profile (TAP)				
Haig & LeBreck 2000	Team dynamics. 10 items with 3-point Likert scales.	Hospital rehab unit in US. 40 team members from multiple professions.	Not reported.	Tool included. Contact: andyhaig@umich.edu Postlicensure.
Teamwork Climate Scale				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Thomas et al 2003	Critical care physicians' and nurses' attitudes about teamwork. 7 items with 5-point Likert scales.	Hospital in US 320 clinicians from 2 professions.	Internal consistency Cronbach's α=.78 Face validity reported.	Tool not included. Contact: eric.thomas@uth.tmc.edu Postlicensure. Tool derived from ICUMAQ (Thomas et al 2003).
University of Western England (UWE) Entry-Level Interprofessional Questionnaire (ELIQ)				
Pollard et al 2005a	3 subscales: communication and teamwork, IP learning, IP interaction. Unknown number of items with 4- or 5-point Likert scales.	University in UK. 627 students from 8 disciplines.	Not reported.	Not included. Contact: katherine.pollard@uwe.ac.uk Prelicensure.
Pollard et al 2004	4 subscales for 3 questionnaires: communication and teamwork, IP learning, IP interaction, perceptions of relationships with colleagues. 27 items with 5-point Likert scales.	University in UK. Students from 10 professional programs: Cohort 1=643 Cohort 2=209	Test-retest: Pearson's correlation coefficients (r): Communication and teamwork=.78, IP learning=.86, IP interaction=.77 Internal consistency Cronbach's α: Communication and teamwork=.76, IP learning=.84, IP interaction=.82 Concurrent validity: Pearson correlation (r) UWE- IPQ vs RIPLS and Interprofessional Communication Competence scale (ICCS): UWE-IPQ and RIPLS: r=.84 (p<0.001) UWE-IPQ and ICCS: r=.85 (p<0.001)	Tool not included. Contact: katherine.pollard@uwe.ac.uk Prelicensure.
Pollard et al 2005b	4 subscales: communication and teamwork, IP learning scale, IP interaction, and inter-professional relationships. Unknown number of items with 4- or 5-point Likert scales.	University in UK. 723 students from 7 disciplines.	Factor analysis: scores highly correlated (r=.95, p<0.001) Test-retest r=0.83. Internal consistency Cronbach's α =.71, Concurrent validity: r=.72, p<0.001.	Tool not included; scales for IPQ are attached. Contact: katherine.pollard@uwe.ac.uk Prelicensure. IEPS referenced to Leucht et al 1990.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Pollard et al 2008	4 subscales for 3 questionnaires: communication and teamwork, IP learning, IP interaction, perceptions of relationships with colleagues. 27 items with 5-point Likert scales.	University in UK. Cohort 1 & 2: 275 students health professionals on IP curriculum. Cohort 3: 139 students from allied health on previous uniprofessional curricula. Total =414	Positive correlation between Interprofessional Relationships and Communication and Teamwork Scales (r=.53, p <.001).	Tool not included. Contact: Katherine.Pollard@uwe.ac.uk Prelicensure. Tool referenced to Pollard et al 2004, 2005.
Street et al 2007	Attitudes towards IP learning and professional stereotyping (roles) Modification: authors reversed wording in items 3, 6 and 9 9-items with 5-point Likert scales.	Community setting in UK. 160 students 2 professions.	Internal consistency Cronbach's α: Pre=.89, Post=.86 post Validity: concurrent validity established vs RIPLS.	Tool not included. Contact: Karen_street_khan@yahoo.co.uk Prelicensure. Modified version. Tool referenced to Pollard et al 2004, 2005.
Questionnaire on attitudes, knowledge and perceived skills (Unnamed)				
McLeod et al 2008	Students' own perceived IP skills and knowledge, and assesses student attitudes toward other professions and IP practice. 26 items with 5-point Likert scales, plus 16 open-ended questions.	Universities in Canada. 25 graduate students from 5 disciplines.	Not reported.	Tool included. Contact: not provided Prelicensure.
Questionnaire on knowledge and attitudes about health professions (Unnamed)				
Harward et al 2006	5 subscales: knowledge of training and skills of health professionals; attitude toward interdisciplinary teamwork; attitude toward team leadership by various health professionals; importance of care provided by health professionals; factors in interdisciplinary team function. 38 items with 5-point and 6-point Likert scales.	University in US. 615 medical students.	Internal consistency Cronbach's α: Knowledge questions=.90 Value questions=.33 Leadership questions=.83 Importance of others' roles=.76.	Tool included. Contact: Ms Harward at dhh@med.unc.edu Prelicensure.
Questionnaire on IP teams (Unnamed)				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Anderson et al 2006	Patient case to measure interdependence of professions, central role of the patient, effectiveness of team, barriers to team working, and liaison between community and hospital teams. 19 items with 5-point Likert scales (1=negative, 5=positive).	Hospital in UK. 126 health sciences students from 10 disciplines.	Not reported.	Partial tool included. Contact: Dr E. Anderson, Senior Lecturer in Shared Learning, Leicester/Warwick Medical Schools, Department of Medical and Social Care Education, Maurice Shock Medical Sciences Building, PO Box 138, University Boulevard, Leicester LE1 9HN, UK. Tel: 44 (0)116 252 2946 Prelicensure.
Questionnaire on teamwork (Unnamed)				
Insalaco et al 2007	3 subscales: perceptions of teamwork, responsibility aspects of stroke victim rehabilitation, Speech Language Pathologist (SLP) role. 30 items with 3-point Likert scales. (Authors modified original from 5-point to 3-point).	University in US. 105 students from 3 disciplines.	None reported. Test-retest reliability better with 5-point Likert scales.	Questionnaire included. Contact: insaladm@buffalostate.edu Postlicensure. Specific to allied professions with focus on SLP. Tool referenced to Felsher & Ross 1994.
Questionnaire on IP rounds (Unnamed)				
Rosen et al 2009	Satisfaction with IP rounds. 6 items with 5-point Likert scales.	Hospital in US. 53 staff.	Not reported.	Tool included. Contact: paul.rosen@chp.edu Postlicensure.
Questionnaire on team performance (Unnamed)				
Wisborg et al 2008	Knowledge, confidence and team performance. No information on scoring.	Hospitals in Norway. Unknown number of trauma team members.	Not reported.	Tools not included. Contact: torben.wisborg@helse-finnmark.no Postlicensure.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Questionnaire on professional skills (Unnamed)				
Tornkvist & Hegefjard, 2008	3 out of 7 questions on perceptions of: understanding or satisfaction with own professional skills, skills of other professions, teamwork in home care. (rest of questions pertain to specific program evaluation). 6-point rating scale.	University in Sweden. 88 student in study group and 263 in control group.	Not reported. Questionnaire was piloted with similar students.	Tool questions included. Contact: Christina.hegefjard@sll.se Prelicensure.
Outcome Level 2: Knowledge, skills, abilities				
Attitudes to Community Care Questionnaire (ACCQ) (see Outcome Level 1 for description of tool)				
Attitudes towards teamwork questionnaire (see Outcome Level 1 for description of tool)				
BRAID Competency Survey (BCS)				
De'Bell et al 2008	4 competency subscales: role clarification and affirmation, effective communication and conflict management, participatory planning, decision-making and problem-solving, and self-awareness and reflective practices 12 items. Scale unknown.	Hospital & university in Canada. 38 Health care team members, 26 pre-licensure students.	Not reported.	Tool not included. Contact: Keith De'Bell, University of New Brunswick Saint John Prelicensure and postlicensure.
Collaboration & Satisfaction about Care Decisions (CSCD) (see Outcome Level 1 for description of tool)				
Communication in the OR Survey				
Awad et al 2005	Communication in operating room. Unknown # items with 7-point Likert scales.	Operating rooms in hospitals in US. Unknown number of practitioners from 3 professions.	Validated - no further details given.	Partial tool included. Contact: sawad@bcm.cme.edu Postlicensure.
Competency Assessment Instrument (CAI)				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Chinman et al 2003	15 subscales - 5 related to collaboration: client preferences, holistic approach, family education, family involvement, team value 55 items with 5-point Likert scales.	Mental health provider organizations in US. 269 mental health workers.	Internal consistency Cronbach's α: 15 subscales=.52-.93 Total score=.90. Test-retest reliability=.42-.78 Concurrent validity r=.51, .47 Higher education=higher score for 11 subscales (p<.05).	Tool included. Contact: ayoung@ucla.edu Postlicensure.
Crisis Task Completion Rate (TCR)				
DeVita et al 2005	3 subscales: patient assessment and treatment related; organizing the response; and communication. One set of 29 tasks defined for 5 simulator scenarios, using the 3 subscales.	University in US. 138 health professionals from 4 professions.	Not reported. Inter-rater reliability: scoring by consensus from 138 trainees and facilitator, after reviewing video of each simulation.	Tool described but not provided. Contact: devitam@msx.upmc.edu Postlicensure.
Interdisciplinary Health Care Team Questionnaire (see Outcome Levels 1 and 3 for description of tool)				
Interdisciplinary Team Performance Scale (ITPS) (see Outcome Level 1 for description of tool)				
Interprofessional Education in Geriatric Care Knowledge Questionnaire				
Grymonpre et al 2010	Three surveys measuring 7 competencies: disciplinary articulation, communication, conflict management, flexibility, leadership, team dynamics, goal setting.	Geriatric day hospitals in Canada. 32 intervention participants and 11 control participants from 5 disciplines.	Not reported.	Tool not included. Contact: grymonpr@ms.umanitoba.ca Prelicensure.
Interprofessional Delirium Knowledge Test (IDKT)				
Brajtman et al 2008	Delirium case study tool. 4 areas: identification, causes and management of delirium in terminally ill patients, psychosocial care of patient and family, roles of team members & contribution to patient care, communication. 5 open-ended questions scored with rubric.	Palliative care unit in Canada. 10 team members, volunteers and students from 6 professions	Face and content validity reported.	Tool not included. Contact: brajtman@uottawa.ca Prelicensure and postlicensure.
Interprofessional Facilitation Scale (IPFS)				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Sargeant et al 2010	2 subscales: IP facilitation (7 competencies), collaborative patient-centred practice (9 competencies). 15 items with 4-point scales.	Health professionals working with cancer care patients in outpatient clinics in Canada. 311 professionals from 15 health disciplines.	Cronbach's α =.94 Validity: Factor 1: interitem correlations =.42 to .64 Factor 2: interitem correlations =.47 to .66	Tool included. Contact: Joan.Sargeant@dal.ca. Postlicensure Modified version of tool referenced to RN-PDC (Halifax, NS).
Northern Hospital Emergency Nurse Practitioner Staff Survey (Considine & Martin 2005)				
Considine & Martin 2005	Staff's understanding of the nurse practitioner (NP) role in the emergency department (ED). 5 subscales: ED NP role, requirements to become an ED NP, Advanced emergency nursing practice, extensions to emergency nursing practice, collaborative practice. 21 items with 5-point Likert scales.	2 EDs in Australia. 56 medical and nursing staff.	Cronbach's alpha=.926 (high degree of internal consistency). 5 factors with correlation coefficients that explain 76.7% of the variance.	Tool included. Contact: julie.considine@nh.org.au Appropriate for practice. Although this is about staff's understanding of NPs in the ED, this could be adapted for other profession.
Student Perception Survey (see Outcome Level 1 for description of tool)				
Team Anomie Scale (see Outcome Level 1 for description of tool)				
Team Skills Scale (TSS)				
Miller & Ishler 2001 Modified	Team skills. 17 items with 5-point Likert scales. Modified from original: 17 of the 20 items related interdisciplinary team skills were utilized. Remaining 3 attitudinal items examined individually.	Hospital in US. 25 students from 4 disciplines.	Internal consistency Cronbach's α=.95. Psychometrics from Miller et al, 1998, and Rose et al, 1999.	Tool not included. Contact: bkoppmiller@mco.edu Prelicensure.
Curran et al 2005 Modified	Team skills. 15 items with 5-point Likert scales.	University in Canada. 133 students from 3 disciplines.	Not reported.	Tool not included. Contact: vcurran@mun.ca Prelicensure. Tool referenced to Hepburn et al 1996.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Fulmer et al 2005	Team skills. 17 items with 5-point Likert scales.	University and teaching hospitals in US. 537 postgraduate students.	Reported in Hyer et al 2000. Cronbach's α=.94.	Tool not included. Contact: terry.fulmer@nyu.edu Prelicensure. Tool referenced to Fulmer & Hyer 1998a and 1998b, Hyer et al 2002
Grymonpre et al 2010	3 subscales: interpersonal skills, discipline-specific skills, and geriatric care skills 17 items with 5-point Likert scales.	University in Canada. 32 intervention and 11 control students from 5 disciplines.	Reported in Hepburn 1998, 2002.	Tool not included. Contact: grymonpr@ms.umanitoba.ca Prelicensure. Tool referenced to Sigler, 1998 and Hepburn, 2002.
Questionnaire on self-efficacy in teamwork (unnamed)				
Paige et al 2009	Self-efficacy (confidence/attitudinal) in teamwork competency. 15 items with 6-point Likert scales.	Hospital in US. 45 staff from 3 disciplines.	Not reported.	Some items included. Contact: jpaige@lsuhsc.edu Postlicensure.
Questionnaire about interprofessional learning (unnamed)				
Anderson et al 2009	Knowledge gain against 8 learning outcomes. Course design, relevance, and content; questions address learning interprofessionally. 16 items with 5-point Likert scales. Open-ended questions.	Hospital in UK. 178 students from several disciplines.	Not reported.	Tool included. Contact: esa1@le.ac.uk Prelicensure.
Questionnaire about effective teamwork preparation (unnamed) (also applies to Outcome Level 6)				
McNair et al 2005	Competencies in teamwork. 31 items pre/post questionnaires and 21 additional on post-questionnaire with 5-point Likert scales. 12 open-ended questions.	University in Australia. 149 students from 4 professions.	Not reported.	Tool included. Contact: r.mcnair@unimelb.edu.au Prelicensure.
Questionnaire about leadership and motivation in interprofessional collaboration (unnamed) (also applies to Outcome Level 4)				
Odegard 2007	Aspects of IP collaboration: time used on collaboration with professionals from other	College in Norway. 134 students from 8	Not reported.	Tool not included. Contact:

Reference	Tool Description	Setting & sample	Psychometrics	Comments
	organizations/services, with professionals from their own. Organization, and leadership and motivation. 48 items with an unknown rating scale.	disciplines in pediatric mental health.		atle.odegard@hiMolde.no Postlicensure.
Outcome Level 3: Behaviour				
Anaesthetists' non-technical skills (ANTS)				
Fletcher 2003	4 subscales: task management, team working, situation awareness, decision making. Observer checklist. 18 items with 4-point rating scales.	Hospitals in Scotland. 50 anaesthetists.	Inter-rater reliability: item level=.55-.67; subscale level=.56-.65. Cronbach's α=.79-.86 for items	Tool included. Contact: rflin@abdn.ac.uk Postlicensure.
Attitudes towards teamwork questionnaire (see Outcome Level 1 for description of tool)				
Behavioral Marker Audit Form for neonatal resuscitation: measuring team behaviours				
Thomas et al 2006	3 subscales: communication, leadership, management. Observation form. 10 items with 5-point Likert scales.	Hospitals in US. 132 video records.	Inter-rater reliability: Team behaviours 'fair' (kappa coefficient k =.41–.60) or 'good' (k = .61–.80) for all teamwork behaviours except 'slight' (k =.21–.40) for workload management, vigilance, and leadership Validity: Scales weakly but significantly correlated with independent measures of quality.	Tool not included. Contact: eric.thomas@uth.tmc.edu Postlicensure.
Behavioural rating system				
Gaba et al 1998	Observer rating scales for team behaviours in 2 emergency room team scenarios: malignant hyperthermia and cardiac arrest. 13 team behaviours assessed with 5-point rating scale (1=poor performance, 5=outstanding performance).	Hospitals in US. 72 residents, faculty and certified nurse anesthetists.	Within-group inter-rater reliability r=.60-.93.	Partial tool included. Contact: gaba@leland.stanford.edu Postlicensure.
Buchanan's scale (1998) (modified)				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Quoidbach & Hansenne 2009 Modified	Group cohesiveness . 7 items with 5-point Likert scales.	Hospital in Belgium. 421 professionals from 2 disciplines.	Internal consistency Cronbach's α=.84 In previous studies α=..83- .91.	Tool not included. Contact: jquoidbach@ulg.ac.be Postlicensure.
Collaborative Practice Assessment Tool (CPAT)				
Schroder et al, 2011	8 domains: Mission, meaningful purpose, goals; general relationships; team leadership; general role responsibilities and autonomy; communication and information exchange; community linkages and coordination of care; decision-making and conflict management; patient involvement. 57 items with 7-point Likert scales . 3 open-ended questions on team's strengths, challenges, and help needed to improve collaborative practice.	Practice teams in Canada. 111 practice teams in Canada.	Cronbach's α for subscales: Mission, Meaningful purpose, Goals= .88, General relationships = .89, Team leadership = .80, General role responsibilities and autonomy; = .81, Communication & information exchange = .84, Community linkages & coordination of care = .76, Decision-making & conflict management .67, Patient involvement= .87	Tool at: http://meds.queensu.ca/oipep/assets/CPAT_Statistical_Analysis.pdf Contact: Anne O'Riordan at ao3@queensu.ca Postlicensure.
Communication observation instrument				
Verhoef et al 2005	Scoring form to record number of seconds participants spend on 3 types of communication in a team conference: grounding messages, non-team coordination messages, team coordination messages.	Rehabilitation clinics in Netherlands. 20 team meetings with patients (10 initial and 10 follow-up).	Inter-rater reliability: no significant differences between raters. Intra-class coefficient =.98 for initial team conferences, for follow-up conferences =.99.	Tool included. Contact: j.verhoef@lumc.nl Postlicensure.
Emergency medicine crisis resource management (EMCRM)				
Wallin et al 2007	Observer checklist. 10 behavioural items + overall team leadership skills item with 5-point scales.	University in Sweden. 15 medical students.	Inter-rater reliability r=.68 Also see Gaba et al, 1998.	Tool included. Contact: carl-johan.wallin@ki.se Prelicensure. Tool referenced to Gaba et al 1998.
Group Emotional Intelligence Questionnaire				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Amundson 2005	4 subscales of individual interaction norms: perspective, interpersonal understanding, confronting members, caring orientation; 4 subscales of group interaction norms: self evaluation, resources for working with emotions, fostering an affirmative environment, proactive problem solving & 3 subscales of cross-group interaction norms: organizational awareness, intergroup awareness, external relations. 66 items with 7-point Likert scales.	Health care facilities in US. 85 professionals in 20 IP teams	Internal consistency Cronbach's α: Total score=.96 Individual level=.92 Group level=.92 Cross-group level=.90 Subscales ranged=.69-.89 for 10 of 11 subscales.	Tool not included. Contact: equilibriumone@comcast.net Postlicensure. Tool referenced to Hamme 2003 http://www.profwolff.org/GEIPartners/index_files/Articles/Hamme.dissertation%20final.pdf and Model of Group Emotional Competence (Druskat and Wolff 2001).
ICU Nurse-Physician Questionnaire (modified short-form)				
Miller & Ishler 2001	10 subscales: physician leadership, communication openness within groups, communication openness between groups, communication timeliness, problem solving between groups, communication satisfaction, problem solving within groups, physician expertise, meeting effectiveness, and technical quality of care provided. 59 items with 5-point Likert scales.	Hospital in US. 80 staff from 2 disciplines.	Internal consistency Cronbach's α: Physician leadership=.88, Communication openness within groups=.83, Communication openness between groups=.88, Communication timeliness=.64, Problem solving between groups=.82, Problem solving within groups=.81 Not reported for remaining subscales.	Tool not included. Contact: bkoppmiller@mco.edu Postlicensure.
Independent measure of team performance				
Millward & Jeffries 2001	4 areas: effectiveness of achieving objectives, how well they operate as a team, cooperation within the team, and cooperation with the organization. 4 items with 5-point Likert scales.	Healthcare setting in UK. 99 staff in healthcare setting, unknown disciplines.	Not reported.	Tool included. Contact: l.millward-purvis@surrey.ac.uk Postlicensure.
Index of Interdisciplinary Collaboration				
Parker-Oliver et al 2005	5 subscales: Interdependence, newly created professional activities, flexibility, collective ownership of goals, and reflection on process. 42 items with 5-point Likert scales.	Hospice facilities in US. 77 social workers.	Internal consistency Cronbach's α: Total scale=.92 Interdependence= .78, Newly created professional activities=.75,	Partial tool included. Contact: oliverdr@health.missouri.edu Postlicensure.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
			Flexibility=.62, Collective ownership of goals =.80, Reflection on process=.82	
Interdisciplinary Health Care Team Questionnaire (see Outcome Level 1 for description of tool)				
Intensive Care Unit Management Attitudes Questionnaire (ICUMAQ)				
Thomas et al 2003	Teamwork climate in 2 areas: quality of collaboration, communication, 7 items with 5-point rating scales.	Intensive care units in hospitals in US. 320 professionals from 2 disciplines.	Internal consistency Cronbach's α=.78. Face validity reported.	Tool not included. Contact: eric.thomas@uth.tmc.edu Postlicensure. Tool referenced to Sexton et al 2000, Helmreich et al 1993, Helmreich et al 1984.
Interprofessional Collaboration Scale				
Kenaszchuck et al 2010	IP collaboration among multiple health professional groups. 3 subscales: communication, accommodation, isolation. (Nurse-Physician Relations Subscale of the Nursing Work Index (NWI-NPRS) and the subscales of the Attitudes Toward Health Care Teams Scale (ATHCTS) were used to measure the concurrent, convergent and discriminant validity).	Hospitals in Canada. Number of sample not provided.	Cronbach's α: Intercorrelations between subscales: Communication-Accommodation, r = .86, Communication-Isolation, r= .78 Accommodation-Isolation, r =.77 Construct validity: Correlations IPC as total scale: range between r =.66 and r =.85. Convergent validity: Correlations between the NWI-NPRS and the 3 IPC factors: Communication, r= .80, Accommodation, r = .73, Isolation, r= .67 Discriminant validity: The IPC subscale correlations with the ATHCTS subscales were considerably lower (between r= .2 and .4) or negative (-.28 and -.20).	Tool not included. Contact: kenaszchuk@smh.toronto.ca Postlicensure. Tool referenced to Lake 2002.
Medical Team Training Questionnaire				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Mills et al 2008	4 subscales: organizational culture, communication, teamwork, human factors awareness. 26 Items with 5-point Likert scales.	Hospital in US. 233 staff from 2 disciplines.	Internal consistency Cronbach's α: Organizational culture=.79 Communication=.82, Teamwork=.86, Human factors awareness=.84	Tool included. Contact: Peter Mills: 802-295-9363 (email unavailable). Postlicensure.
Medication Use Processes Matrix (MUPM) (see Outcome Level 1 for description of tool)				
Multidisciplinary collaboration instrument (MDC) (see Outcome Level 1 for description of tool)				
Modified Collaboration and Satisfaction About Care Decisions (CSACD-N)				
Dechairo-Marino et al 2001 Modified	6 attributes of collaboration and 1 global measure of amount of collaboration. 7 items with 7-point Likert scales. Tool modified to measure process on unit vs. original which rated individual patients.	University in US. 122 nurses.	Internal consistency Cronbach's α=.94.	Tool not included. Contact: dechairomarino@earthlink.net Prelicensure.
OR 360-Degree Teamwork Assessment Scale (ORTAS)				
Paige et al 2009	Self- and peer-assessments of observable behaviours associated with effective teamwork (e.g., team orientation, accountability and communication). 13 items with 6-point Likert scales.	Hospital in US. 17 professionals from 1 discipline.	Factor analysis: single factor for individual behaviours contributing to effective OR teamwork.	Tool not included. Contact:jpaige@lsuhsc.edu Postlicensure.
Observational Teamwork Assessment for Surgery (OTAS)				
Sevdalis et al 2009	2 sections: Teamwork-related task checklist (patient tasks; equipment/provisions tasks; communication tasks), Teamwork-related behaviours (communication, cooperation, coordination, leadership, monitoring). 15 items with 7-point Likert scales.	Hospital OR in UK. Observations from 12 video recordings of urology surgical procedures.	Construct validity: Significant obtained between expert raters' scores for 12 of 15 behaviours. All 5 behaviours in preoperative phase (rs =.51 and .77); 4 of 5 behaviours in intra-operative phase (rs =.62 and .94) 3 of 5 behaviours in postoperative phase rs = .65 and .89). 3 of 15 significant correlations for expert-novice pairs of raters.	Tool not included. Contact: n.sevdalis@imperial.ac.uk Postlicensure.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Undre et al 2007	2 sections: Teamwork-related task checklist (patient tasks; equipment/provisions tasks; communication tasks), Teamwork-related behaviours (communication, cooperation, coordination, leadership, monitoring). 20 items with 7-point Likert scales.	Hospital OR in UK. Observations from 50 video recordings of urology surgical procedures.	Inter-rater reliability: correlations for cooperation, coordination and leadership: r=> .50, communication r=.35.	Tool not included. Contact: n.sevdalis@imperial.ac.uk. Postlicensure.
Relational Coordination Scale				
Nadolski et al 2006	2 areas: communication (frequency, timeliness, accuracy, and problem-solving communication), and relationship (shared knowledge, shared goals, and mutual respect). 7 items with 5-point Likert scales; 9 items from Brief Symptom Inventory (BSI).	Hospital in US. 167 students and professionals from 2 disciplines.	Internal consistency of overall score Cronbach's α=.85. (reported in Gittell et al 2000)	Tool not included. Contact: gnadolsk@iupui.edu Prelicensure and postlicensure. Tool referenced to Gittell et al 2000.
Hoffer Gittell 2004 Original	4 areas of communication (frequent, timely, accurate, problem-solving) and 3 areas of relationships (shared goals, shared knowledge, mutual respect) among 6 different care providers around patient care coordination. 42 items with 5-point Likert scales.	Various hospitals in the US. 338 care providers from 6 disciplines.	Cronbach's α=.86.	Tool included. Contact: Jody Hoffer Gittell, Brandeis University, Phone: 781.736.3680.
Spanish version of Intensity of Interprofessional Collaboration (Sicotte 2002)				
San Martin-Rodriguez et al 2008	4 areas: information sharing, common care plan, collaboration on patient follow-up, sharing of clinical responsibilities. 16 items with 5-point Likert scales.	University in Spain. 34 professionals from 2 disciplines.	Principle components analysis = 4 factors explaining 61.47% of variance. Cronbach's α=0.91. Concurrent validity: Pearson correlation coefficient between Spanish version and similar tool=.72. (Reported in San Martin-Rodriguez, L., D'Amour, D., & Leduc, N., 2007).	Tool not included. Contact: smartin@unav.es Postlicensure.
Team Anomie Scale (see Outcome Level 1 for description of tool)				
Team Climate Inventory (TCI)				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Bosch et al 2008 Short version	4 factors of team interaction: vision, participative safety, task orientation and support for innovation. 14 items with 5-point Likert scales.	Primary care practices in Netherlands. 83 providers from various professions.	Internal consistency Cronbach's α=.91 Correlations: Between scales & measure=.75-.84 Individual factors: vision=.81, participative safety =.79, task orientation=.78 and support for innovation=.82. Individual factors r=.49–.53.	Tool not included. Contact: m.bosch@iq.umcn.nl Postlicensure.
Kivimaki & Elovainio 1999 Short version	4 factors of team interaction: vision, participative safety, task orientation and support for innovation. 14 items with 5-point Likert scales.	Local government in Finland. 3015 employees.	Internal consistency Cronbach's α=.91 Reliability P<.0001 High correlations between shortened and original versions. High bivariate correlations suggest similar predictive validity of shortened and original TCI (no value given).	Partial tool included. Contact: mika.kivimaki@occuphealth.fi Postlicensure.
Anderson & West 1998	4 factors of team interaction: vision, participative safety, task orientation and support for innovation. 38 items with 5-point and 7-point Likert scales.	Hospital management teams in UK. 155 employees.	Internal consistency Cronbach's α for each factor =.84-.94 Intercorrelation p<0.01.	Items included. Contact: Neil Anderson, Goldsmiths College, University of London, New Cross, London SE14 6NW UK. Postlicensure. Research use of TCI permitted.
Team Dimensions Rating Form				
Morey et al 2002	Observer checklist for team behaviours with 5 teamwork dimension (e.g. apply problem solving strategies). 5 items with 7-point rating scales (1=very poor, 7=superior)	Hospital emergency departments in US. Experimental group=684 staff Control group= 374 staff	Internal consistency Cronbach's α=.94 Inter-rater reliability=.61-.81 across 5 dimensions.	Tool not included. Contact: John C. Morey, Senior Research Psychologist, Crew Performance Group, Dynamics Research Corporation, 60 Frontage Road Andover, MA 01810, USA. Postlicensure.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Team Effectiveness Scale				
Amundson 2005	2 subscales: team performance, personal and social criterion. Member version: 7 items with 7-point Likert scales. Supervisor version: 5 items with 7-point Likert scales.	Health care facilities in US. 85 professionals from various professions.	Internal consistency Cronbach's α: Member version =.89 Supervisor version =.58. Pearson correlation high between group emotional competence and member perceived effectiveness.	Tool not included. Author contact: equilibriumone@comcast.net Postlicensure.
Team Legitimacy Questionnaire				
Quoidbach & Hansenne 2009	1 area: team legitimacy. 15 items with 4-point Likert scales.	Hospital in Belgium. 421 professionals from 2 disciplines.	Internal consistency Cronbach's α=.85.	Tool not included. Contact: jquoidbach@ulg.ac.be Postlicensure. Author notes absence of an assessment of personality factors.
Team Observation Scale (TOS)				
Cole et al 2003	9 subscales of interdisciplinary team functioning covering a range of behaviours. 67 items with binary (yes/no) scales.	Various care settings in US. 26 teams with 3 to 19 staff/students from 4 professions.	Not reported.	Tool not included. Contact: Kenneth D. Cole, VA Healthcare System, Long Beach, CA 90822. Prelicensure and postlicensure.
Anderson et al 2008 Modified	Team behaviour displayed at team meetings (professional roles, leadership, communication and conflict, meeting skills, outcome). 29 items with binary (yes/no) scales and open-ended questions.	Various primary care settings in Canada. 51 students from 7 health care professions.	Not reported.	Tool not included. Contact: Christine_Ateah@umanitoba.ca Prelicensure. Tool referenced to GITT-KIT Hyer et al. (2003).
Treatment Team Functioning Checklist (also applies to Outcome Levels 5 and 6)				
Singh et al 2006	Treatment team functioning: conduct of meeting, assessments, synthesis of assessments, patient involvement, patient's explanatory model, treatment objectives, and	Inpatient psychiatric hospital in US. 3 teams with 6 health	Inter-rater reliability: 95% to 100% across baseline, intervention, and follow-up.	Tool not included. Contact: ONE Research Institute in Midlothian, Virginia.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
	tying up of loose ends. 50 items with 4-point Likert scales.	professionals per team.		Postlicensure. Tool referenced to Treatment Team Planning Rating Scale (Singh 1998a) and Treatment Team Functioning Checklist (Singh 1998b).
Questionnaire on group processes developed in Dutch (unnamed)				
Roelofsen et al 2001	Group processes of rehabilitation team conferences. 4 areas: Personal participation, negative socio-emotional behaviour, result satisfaction, and process satisfaction. 20 items with 5-point Likert scales.	Rehabilitation centre in Netherlands. 44 professionals from 8 disciplines.	Internal consistency Cronbach's α: Informal leadership=.54 Process Satisfaction=.84 Result satisfaction=.76 Negative Socio-emotional behaviour=.78 Domain structure confirmed through Spearman's rank correlations, item-total and item-rest correlations. Assessed influence of social desirability. 4 domains in adapted questionnaire had psychometrics similar to original.	Tool included. Contact: reva@azvu.nl Postlicensure. Tool referenced to Green and Taber 1980. Translated and adapted questionnaire can be used.
Questionnaire to measure team type (unnamed)				
Thylesfors et al 2005	6 subscales: role specialization, task interdependence, coordination, task specialization, leadership and role interdependence. 37 items with 3-point scales.	Hospitals in Sweden. Sample 1=206, sample 2=131 health professionals from different disciplines.	Internal consistency Cronbach's α: For all sub-scales=.65. Goal achievement=.89 Team climate index (17 items)=.93 Validity: Team type correlates with perceived efficiency r=.29; p <.01 and with team climate r=.29; p <.01. Perceived efficiency and team climate: positive and significant relationship (r=.64; p <.01.	Tool not included. E-mail: ingela.thylefors@psy.gu.se Postlicensure. Instrument constructed by an operationalization of central themes found in descriptions of multi-, inter-, and trans-professional models of team functioning.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
			Predictive validity: predicted perceived efficiency (R^2 = 0.415; F (3, 153) = 36.25; p <.001).	
Questionnaire on team establishment and processes (unnamed)				
Abendstern et al 2006	1 area: Characteristics of team's establishment and work processes. Structural characteristics: extent of integration and specialisation. Process indicators: assessment and care planning, access, person-centred practice and carer support. No description of items or rating scale. Each indicator measured by a combination of individual descriptive data and responses on items addressing 8 composite practice standards.	Homecare services in UK. 52 professional teams with staff from health and social care.	Not reported.	Tool included. Contact: michele.abendstern@manchester.ac.uk Postlicensure. Questionnaire based on literature review of nature, extent, and quality of practice.
Team survey (unnamed)				
Millward et al 2001	4 areas: team orientation and self-regulation; team potency; team identification; shared mental models. 43 items with unknown scale.	Healthcare setting in UK. 99 staff from unknown disciplines.	Factor analysis accounted for 49.1% of variance. Internal reliability Cronbach's α: Team orientation and self-regulation=.93, Team potency=.76, Team identification=.73, Shared mental models=.83	Tool included. Contact: l.millward-purvis@surrey.ac.uk Postlicensure. Tool referenced to Millward and Ramsey 1998. Authors note tool is powerful because it does not rely solely on self-report. It is an objective index of effectiveness that can be used to evaluate effect of team development training.

Outcome Level 4: Organizational Practice

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Competing Values Framework				
Bosch et al 2008	4 cultures domains: group, developmental, rational & hierarchical.	Diabetes clinics in Netherlands. 83 practitioners treating 752 patients.	Internal Reliability Cronbach's α: Group α = .64, Developmental α= .51, Rational α =.46, Hierarchical α= .55	Tool not included. Contact: R Quinn, University of New York at Albany, NY. Postlicensure. Tool referenced to Quinn et al 1984.
Healthcare Team Vitality Instrument (HTVI) (see Outcome Level 1 for description of tool)				
Index of Interprofessional Team Collaboration for Expanded School Mental Health (IITC-ESMH) (see Outcome Level 1 for description of tool)				
Survey of Organizational Attributes of Primary Care (SOAPC)				
Ohman-Strickland et al 2006	4 areas: communication, decision-making, stress/chaos, and history of change. 21 items with 5-point Likert scales.	Family practices in US. 640 professionals from 3 disciplines.	Factor analysis yielded 4 factors.	Tool included. Contact: not reported. Postlicensure. Author notes measure can reliably measure organizational attributes relevant to family practices. Instrument has not been widely tested.
Questionnaire about leadership and motivation in interprofessional collaboration (unnamed) (see Outcome Level 2 for description of tool)				
Questionnaire on teamwork (unnamed)				
Korner 2010	2 subscales: structure orientation (objective orientation and task accomplishment), person orientation (cohesion [confidence, social support and respect] and willingness to accept responsibility). 24 items using binary comments.	Medical rehabilitation clinics in Germany. 378 from all groups of health care professionals.	Not reported.	Tool not included. Contact: mirjam.koerner@medsoz.uni-freiburg.de Postlicensure. Allows for description of cooperation in a team and suggestions for team development.

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Outcome Level 5: Patient Satisfaction				
Child Perception of Specialty Care				
Naar-King et al 2002	3 subscales: general satisfaction, worth, & access. 9 items with 5-point Likert scales.	Hospital in US. 63 children.	Internal consistency Cronbach's α: General Satisfaction scale=.92, Worth scale=.84, Access scale=.83	Tool included. Contact: snaarkin@med.wayne.edu Patients (children). Tool referenced to Naar-King 2001.
Parent Perception of Specialty Care				
Naar-King et al 2002	3 subscales: general satisfaction, worth, access. 18 items with 5-point Likert scales.	Hospital in US. 345 parents.	Internal consistency Cronbach's α: General satisfaction scale=.92 Worth=.84 Access=.83	Partial tool included. Contact: snaarkin@med.wayne.edu General public. Tool referenced to Perception of Procedures Questionnaire (Kazak et al 1996) and Service Satisfaction Scale (Attkisson & Greenfield 1996). Authors note importance of including assessment of other outcomes and linking program processes with program outcomes.
Patient satisfaction with multidisciplinary meeting				
Choy et al 2007	1 area: patients' satisfaction with multidisciplinary meeting. 10 items with 5-point Likert scales.	Hospital in Australia. 22 patients.	Not reported.	Tool included. Contact: ellis_choy@optusnet.com.au Patients.
Patient Satisfaction Survey				
Morey et al 2002	Patients evaluate whether teamwork behaviours are evident in care.	Hospital emergency departments in US.	Internal consistency Cronbach's α=.97	Tool not included. Contact: John C. Morey, Senior

Reference	Tool Description	Setting & sample	Psychometrics	Comments
	12 items with 7-point scale (strongly disagree to strongly agree).	6 experimental sites and 3 control sites (N not provided).		Research Psychologist, Crew Performance Group, Dynamics Research Corporation, 60 Frontage Road Andover, MA 01810. Patients.
Patient Survey				
Preen et al 2005	6 areas: satisfaction with hospital discharge, understanding of and confidence with post-discharge expectations, satisfaction with discharge personnel, availability of post-hospital services, patient involvement with discharge planning, and post-discharge general practitioner follow-up 14 items with 5-point Likert scales.	Hospitals in Australia. 128 patients.	Pre-study assessment of inter-observer and intra-subject reliability yielded >95% agreement.	Tool included. Contact: davidp@sph.uwa.edu.au Patients. Authors note that validity and reliability of tool for use with chronically ill patients has been demonstrated in literature, and it has been compared favourably to the SF-36.
Satisfaction With Treatment Team Planning Rating Scale				
Singh et al 2006	Patient satisfaction with treatment team planning. 10 items with 4-point Likert scales.	Inpatient psychiatric hospital in US. 18 health professionals from 6 disciplines	Inter-rater reliability=95% to 100% across baseline, intervention, and follow-up.	Tool not included. Contact: ONE Research Institute in Midlothian, Virginia. Patients. Tool referenced to Singh 1998a.
Treatment Team Functioning Checklist (see Outcome Level 3 for description of tool)				
Questionnaire on patient perspectives on IP rounds (unnamed)				
Rosen et al 2009	Patient perspectives on IP rounds. 5 items with 5-point Likert scales.	Hospital in US. 10 patients.	Not reported.	Tool included. Contact: paul.rosen@chp.edu Patients.
Outcome Level 6: Provider Satisfaction				
Administrative Support questionnaire				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Smits et al 2003	Degree to which medical, nursing and hospital administration hinders or helps team's efforts to achieve optimal patient outcomes. Unknown number of items with 11-point rating scales (-5=maximum hindrance; 0=neither hindered or helped; +5=maximum help).	Veterans Administration Hospitals in US. 650 rehabilitation team members.	Internal consistency Cronbach's α=.84	Tool not included. Contact: j.falconer@northwestern.edu Postlicensure.
Attending Physician Support questionnaire				
Smits et al 2003 Modified	Degree of help, concern, and friendship shown to rehabilitation team members by the attending physician who leads the team. 9 items with true/false responses.	Veterans Administration Hospitals in US. 650 rehabilitation team members.	Internal consistency Cronbach's α=.93 See Shortell et al 1995.	Tool not included. Contact: j.falconer@northwestern.edu Postlicensure. Tool referenced to Group Environment Scale, Moos 1986.
Collaboration and Satisfaction About Decision Care (CSACD)				
Baggs 1994	Nurse-physician or allied health professional collaboration associated with making specific patient care decisions. 6 items with 7-point Likert scales, 1 item on amount of collaboration with 7-Likert scales.	Hospital in US. 58 staff from 2 professions.	Internal consistency Cronbach's α: 6 critical-attribute collaboration items=.93. Correlation between two satisfaction items r=.64. Correlation with global collaboration items r=.78 vs r=.50 Criterion validity: correlation between global collaboration total of 6 critical attribute items r=.87. Correlation between collaboration and satisfaction with decision-making process r=.69. Correlation between collaboration and satisfaction with decision r=.50. Factor analysis loadings for 6 items ranged from .82 to .93.	Tool included. Contact: Judith Gedney Baggs PbD RN Assistant Professor. Box SON, School of Nursing, University of Rochester Medical Center. Rochester, New York 14642, USA Postlicensure. Authors suggested responses can be linked to specific patient outcomes (e.g., length of stay, mortality and morbidity) and provider outcomes (e.g., job satisfaction and retention of nurses).

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Dieleman et al 2004	Nurse-physician or allied health professional collaboration associated with making specific patient care decisions. 6 items with 7-point Likert scales, 1 item on amount of collaboration with 7-point Likert scales.	Hospital in Canada. 22 professionals in 4 disciplines.	Internal consistency Cronbach's α =.89 at Time 1.	Tool not included. Contact: karen-farris@uiowa.edu Postlicensure. Tool referenced to Baggs 1994.
General Practitioner Survey				
Preen et al 2005	4 areas: hospital-general practitioner communication, satisfaction with their patient's discharge, involvement in discharge planning, and efficacy of the discharge plan. 8 items with 5-point Likert scales.	Hospitals in Australia. 107 physicians.	Not reported.	Tool included. Contact: davidp@sph.uwa.edu.au Postlicensure. Survey items were developed from a series of focus groups.
Hospital Culture questionnaire				
Smits et al 2003	5 subscales: hospital character; managers; cohesion; emphases; rewards. 20 items. Respondents asked to distribute 100 points among 4 competing descriptions of hospital cultures (A,B,C,D) to indicate how similar they are to the respondent's hospital. Scores for all 5 subscales are summed; possible range =0-500.	Veterans Administration Hospitals in US. 650 rehabilitation team members.	Internal consistency Cronbach's α=.93. See Shortell et al 1995.	Tool not included. Contact: j.falconer@northwestern.edu Postlicensure. Tool referenced to Shortell et al 1995.
Physician Involvement Questionnaire				
Smits et al 2003	Attending physicians' efforts in activities likely to affect team performance, e.g. "coordinate the activities of the different rehab team members." 9 items with 7-point rating scales.	Veterans Administration Hospitals in US. 650 rehabilitation team members.	Internal consistency Cronbach's α= .93	Tool not included. Contact: j.falconer@northwestern.edu Postlicensure.
Physician satisfaction with multidisciplinary meeting				

Reference	Tool Description	Setting & sample	Psychometrics	Comments
Choy et al 2007	1 area: clinicians' satisfaction with multidisciplinary meeting. 10 items with 5-point Likert scales.	Hospital in Australia. 17 clinicians.	Not reported.	Tool included. Contact: ellis_choy@optusnet.com.au Postlicensure.
Provider judgement of family participation in care meetings (see Outcome Level 1 for description of tool)				
Questionnaire on Staff Satisfaction in Medical Rehabilitation				
Korner 2010	3 subscales: workplace atmosphere, leadership, organization and communication. 31 items in binary six-degree form . The possible scores on rating scale (1–6) are transformed to values of 0–5, and then transformed to averages from 0 to 10.	Rehabilitation centre in Germany. 378 professionals from many professions.	Factor analysis conducted. Internal consistency Cronbach's α=.86-.95. Average resolution of items =.61-.73. Scales correlate highly (r=.61–.81) with independent indicators for job satisfaction. Correlation with non-related individual items is low (r=.11–.54). (as reported by Farin et al 2002)	Tool not included. Contact: mirjam.koerner@medsoz.uni-freiburg.de Postlicensure. Tool referenced to Farin et al 2002 (German).
Satisfaction Survey				
Curran et al 2010a	Attitudes towards teamwork and teamwork abilities. 12 items with 5-point Likert scales.	University in Canada. 137 professionals.	Not reported.	Tool not included. Contact: vcurran@mun.ca Prelicensure. Tool referenced to Heinemann et al 1999.
Curran et al 2010b	Extent to which module enhanced knowledge and understanding of IP teamwork, role of their professions and others, organization and design of module. 16 items with 5-point Likert scales.	University in Canada. 4099 students from several disciplines.	Not reported.	Tool not included. E-mail: vcurran@mun.ca Prelicensure. Tool referenced to Heinemann 1999.
Satisfaction With Treatment Team Planning Rating Scale				
Singh et al 2006	Staff satisfaction with team treatment planning.	Psychiatric hospital US. 18 professionals from	Reliability of assessments between independent rater and mentor	Tool not included. Contact: ONE Research Institute

Reference	Tool Description	Setting & sample	Psychometrics	Comments
	10 items with 4-point Likert scales.	several disciplines.	computed across baseline and intervention sessions and 4 follow-up sessions. Inter-rater reliability=95-100% across baseline, intervention, and follow-up.	in Midlothian, Virginia. Postlicensure.
Supervisor Expectations questionnaire				
Smits et al 2003	Supervisor expectations as perceived by team members, e.g., "developing co-treatment plans with other rehab professionals." 6 items with 7-point rating scales (1=not important; 7=very important).	Veterans Administration Hospitals in US. 650 rehabilitation team members.	Internal consistency Cronbach's α =.80.	Tool not included. Contact: j.falconer@northwestern.edu Postlicensure.
Treatment Team Functioning Checklist (see Outcome Levels 3 and 5 for description of tool)				
Questionnaire about effective teamwork preparation (unnamed) (see Outcome Level 2 for description of tool)				

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