But Are They Competent?
Interprofessional Clinicians (IPCs) Assessing Developmental Pediatric Trainees' Communicator and Collaborator Competencies

Lyn K. Sonnenberg[1,3] MD, MEd, Carol S. Hodgson[1] PhD , Lesley Wiart[2,3] PT, PhD

[1]Dept. of Pediatrics, University of Alberta; [2]Dept. of Physical Therapy, University of Alberta; [3]Glenrose Rehabilitation Hospital, Edmonton, Alberta, Canada

ABSTRACT

Communication and Collaboration are essential competencies for Developmental Pediatricians. This mixed-methods study determined which of the Developmental Pediatrics (DP) CanMEDS Communicator and Collaborator training objectives (*N*=40) were considered to be observable and assessable by 35 IPCs during Trainee core rotations, by quantitative and qualitative methods. Contextual factors that influenced these observations and assessments by Physicians (MD) and IPCs were further explored qualitatively. MDs were able to observe (*M*=33.3, *SD*=5.2) and assess (*M*=31.5, *SD*=7.3) more objectives compared to the IPC group (*M*=24.6, *SD*=8.6 and *M*=20.3, *SD*=10.6, respectively) (*p*<0.01 for both). There were no differences between the IPC discipline sub-groups, Psychology (PSYCH), Nursing (RN), Physical Therapy (PT), Occupational Therapy (OT), Speech and Language Pathology (SLP) and Social Work (SW), or between the Developmental-Behavioural Team (DBT) and Pediatric Rehabilitation Team (PRT) clinical services. There were four themes identified that provided more in-depth qualitative information about observation and assessment: 1) Assessment requires more than simple observation, 2) Assumptions and indirect observations influence assessment, 3) Clinic culture and structure vary between clinical service teams and impact observation and assessment, and 4) Specific assessment criteria are required by IPCs to ensure accurate judgment of the objectives. The next phase for this project will be to integrate the knowledge gleaned from this research into the design and trial of a multisource feedback (MSF) tool, for use by the IPC group, to better assess the DP Trainees' Communicator and Collaborator competencies.

BACKGROUND

With the recent shift to competency-based medical education (CBME), greater emphasis is being placed on outcomes or pre-defined abilities, such as the ability to communicate and collaborate effectively in the work place (Frank et al., 2010). The call has been made for work-based assessment tools that use direct observation and include formative feedback (Iobst et al., 2010).

Since the training of Developmental Pediatricians occurs in interprofessional team settings, receiving feedback from all team members, provided in an appropriate and timely manner, is essential. MSF is well established in the business sector and includes feedback solicited from multiple sources that have direct interaction with the employee or trainee. MSF is particularly practical for providing feedback for the essential physician competencies of Collaborator and Communicator (Brinkman et al., 2007; Joshi et al., 2004). While there has been increasing emphasis on the importance of interdisciplinary practice, there is paucity in the literature with respect to gathering feedback from other clinical disciplines.

STUDY PURPOSE:
This mixed-methods study determined the Communicator and Collaborator objectives that were (A) observed by each discipline and (B) practically assessed by each discipline, during the core DP rotations at the University of Alberta, by self-report. In addition, the contextual themes influencing these observations and assessments were explored qualitatively.

METHODS

This study was approved by the Health Research Ethics Board (Pro00038134) at the University of Alberta. DP Trainees who had recently completed their rotations in Preschool, School-Aged and Pediatric Rehabilitation services were asked to identify PT, OT, SLP, PSYCH, RN, and SW, with whom they frequently worked, during these core rotations at the Glenrose, a large, Canadian, tertiary-level, Rehabilitation Hospital. These clinicians were invited to participate in a survey, along with the MDs Trainees worked most closely with on rotation.

Background information about this study was sent to 35 identified IPCs and 10 MDs (see Table 1 for details), along with a survey listing the current 21 Communicator and 17 Collaborator objectives. These objectives were compiled by the National DP Subspecialty Committee and were approved by the Royal College of Physicians and Surgeons of Canada (RCPSC) in 2013. These objectives compose the skills and traits DP Trainees are require to demonstrate by the end of their training.

Examples of Communicator objectives include: *"Communicate effectively with individuals with developmental conditions", "Be aware of and responsive to nonverbal cues", and "Listen effectively".* Examples of Collaborator objectives include: *"Demonstrate a respectful attitude towards other colleagues and members of an inter-professional team"* and *"Work with others to assess, plan, provide and integrate care for individuals and groups of patients".*

For each objective, participants indicated whether the behaviour was 1) observable, and 2) assessable. Response options were yes, no or unsure. Frequencies, means, and standard deviations were calculated, for each survey item. The responses were coded as yes=1, no=0, unsure=2, which was then recoded to 0, in order to ensure that an over-representation of observable and assessable objectives did not occur. The mean number of objectives observed by the MD group was compared to the IPC group mean and to the mean number of objectives observed by the individual IPC groups using one-way ANOVA and post hoc analyses (Scheffe). The means were compared between the DBT (Preschool and School-aged Teams) and the PRT.

A semi-structured interview process was used to guide the discussion with probes and follow-up questions to seek clarification as necessary for three, team-based focus groups. Data were analyzed using three levels of open coding and descriptive qualitative analysis techniques as informed by the processes described by Kvale (1996) and Tesch (1988). The transcribed text of the interviews was reviewed by three researchers and phrases, sentences or paragraphs were identified that informed the research questions. Meaning units with descriptive codes were labeled and organized into themes with the analysis discussed during team meetings, resulting in increased engagement with the data.

TABLE 1. Participants Divided by Clinical Team and Specialty.

	RN	PSYCH	SLP	OT	PT	SW	TOTAL	MD
Preschool DBT	3	2	3	1	1	0	10	3
School-Aged DBT	2	2	1	1	0	0	6	2
Pediatric Rehab Team	6	1	0	4	5	3	19	5
TOTAL	11	5	4	6	6	3	35	10

Note: PT=Physical Therapists, OT=Occupational Therapists, SLP=Speech-Language Pathologists, PSYCH=Psychologists, RN=Nurses, SW= Social Workers MD=Physicians, DBT=Developmental-Behavioural Team

RESULTS

❖ By self-report, MDs were able to observe and assess more objectives compared to the IPC group (see Table 2). This difference was significant (p<.01 for both).

❖ There were no significant differences between the mean number of objectives considered observable F(5, 29)=0.34, p=.89 and assessable F(5, 29)=1.31, p=.29 by the different IPC disciplines (see Table 2).

❖ There were no differences in self-reported observable or assessable objectives between the DBT (Preschool and School-aged) (M=44.1, SD=18.4) compared to the PRT (M=46.0, SD=18.6), t(33)=0.31, p=.76.

❖ There were four themes identified that provided greater in-depth qualitative information about observation and assessment: 1) Assessment requires more than simple observation, 2) Assumptions and indirect observation influence assessment, 3) Clinic culture and structure vary between clinical service teams and impact observation and assessment, and 4) Specific assessment criteria are required by IPCs to ensure accurate judgment of the objectives.

TABLE 2. Number of Objectives (*N*=40) Observed and Assessed by Self-Report, Divided by Clinical Discipline.

	MD	IPC	PSYCH	RN	SLP	OT	PT	SW
Observable *M,SD*	33.3, 5.2	24.6, 8.6	25.2, 5.4	26.1, 8.3	26.2, 6.8	24.3, 8.6	23.7, 12.8	19.0, 11.0
Assessable *M,SD*	31.5, 7.3	20.3, 10.6	21.5, 10.2	23.5, 10.4	24.0, 9.2	21.2, 8.0	11.5, 10.8	16.3, 15.2

Note: *N*= Maximum number of objectives, M= Mean, *SD*= Standard Deviation, MD= Physicians, IPC= Interprofessional Clinicians, PT=Physical Therapists, OT=Occupational Therapists, SLP=Speech-Language Pathologists, PSYCH=Psychologists, RN=Nurses, SW= Social Workers.

DISCUSSION

Since MDs have traditionally provided the majority of supervision and assessment of DP Trainees, and given that they work in the same discipline as the Trainee, it is logical that they would report the ability to observe and assess the greatest number of objectives, compared to their IPC colleagues.

This study was not adequately powered to detect differences between the clinical disciplines. However, with the exception of the PT and SW groups, the remaining disciplines do seem to report similar experiences. It was reassuring to see that there is no significant difference between the clinical treatment teams. Therefore, the same MSF tool could potentially be used for different clinical teams.

The themes that developed through the focus groups clarified the IPC viewpoint well. Lack of clear assessment criteria and training, along with limited opportunities for direct observation, resulting in the need to make inferences based on assumptions or indirect contact with the Trainees, reduced the ability and comfort level of the IPC in making assessment decisions.

The next phase for this project will be to integrate the knowledge gleaned from this research into the design and trial of a MSF tool. With the move toward CBME, now is the ideal time for greater involvement of IPCs in the assessment of DP Trainees.

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UPLIFTING THE WHOLE PEOPLE.