
**CAPHC-SHN Paediatric Medication Reconciliation Collaborative
Interactive Teleconference Two: Finding Discrepancies, Now What?
Thursday, February 23, 2006
12:00 – 2:00 PM (EST)**

Speakers: Elaine Orrbine (Chair), CEO, Canadian Association of Paediatric Health Centres
JoAnne Whittingham, National Project Coordinator, PMRC
Margaret Colquhoun, ISMP Canada
Virginia Flintoft, SHN! Central Measurement Team

1. Introduction and Welcome

- Elaine Orrbine welcomed all participants to the second interactive teleconference

2. Adoption of Agenda and Approval of the Nov 24th Teleconference Summary

- The agenda and minutes from the November 24, 2005 interactive teleconference were approved with the following corrections -
 - Simone Falconer of NYGH noted that on page 4 the pharmacists name should be Yuen Chan-Lau
 - Kim Streitenberger of HSC noted that on page 5 she had noted that the reports are not easy to annotate in pdf format
- These changes will be made and a revised version sent to all PMRC members

**3. Paediatric Medication Reconciliation Collaborative (PMRC)
Milestones to Date**

- Elaine noted that the primary objective of the interactive calls was to share and learn from each other
- As evident in the pre-circulated progress report, Elaine pointed out that the true leadership of the campaign was coming from our colleagues across the country, and that are collective efforts were making a difference!
- Eighteen health centres are officially on board with secured leadership support and commitment from their respective MedRec teams. All participating centres are at different stages of collecting baseline data
- These health centres represent a rich and diverse collaborative of health care facilities providing health serves to children and youth
- Elaine acknowledged and thanked the following health centres for their tremendous work and congratulating all on their successes to date!
 - Children's & Women's Health Centre of BC, Vancouver, BC
 - Alberta Children's Hospital, Calgary, ALTA
 - Stollery Children's Hospital, Edmonton, AB
 - Saskatoon Health Region Saskatoon, SASK
 - Winnipeg Children's Hospital, Winnipeg Regional Health Authority, MAN
 - Children's Hospital of Eastern Ontario, Ottawa, ON
 - Children's Hospital of Western Ontario, London Health Sciences Centre, ON
 - Credit Valley Hospital, Mississauga, ON
 - Grand River Hospital, Kitchener, ON
 - Hospital for Sick Children, Toronto, ON
 - Kingston General Hospital, Kingston, ON
 - McMaster Children's Hospital, Hamilton Health Sciences, ON

North York General Hospital, Toronto, ON
Orillia Soldier's Memorial Hospital, Orillia, ON
Quinte Healthcare Corporation, Belleville, ON
IWK Health Centre, Halifax, NS
Janeway Children's Health & Rehabilitation Centre, St. John's, NFLD
Hôpital Ste. Justine, Montreal, Qué

- Recognizing that these are very early days, a brief snapshot of the data collected to date was reviewed as follows:
 - The average number of patients reviewed per month was 14 (range of 5 to 21).
 - The preliminary data indicates a median of 0.60 unintentional discrepancies per patient reviewed and a median of 0.38 undocumented intentional discrepancies per patient reviewed.
- Margaret Colquhoun noted that, while she recognized that this was very preliminary data on a very small sample size, she was hearing of similar data across the country from other MedRec teams
- Margaret also added that she felt that this preliminary data was making a strong case for the need for medication reconciliation at all health centres across Canada.

4. What are we learning; baseline data collection

Q&A

Ryan Itterman from Children's Hospital of Western Ontario (London, ON) asked which sites had submitted baseline data? JoAnne reviewed the list of sites that had submitted baseline data including Alberta Children's, CHWO, IWK, McMaster Children's Hospital, North York General Hospital and Winnipeg Children's.

Janet Whalen and Karen Smith from Quinte Health Care (Belleville) noted that their baseline data collection was completed in mid-February.

- They included patients on 2 or more medications and have found similar results to the preliminary data shared on the call
- They noted a challenge with respect to a concern raised by their physicians about including patients that are taking only two medications. The physicians feel that it would be best to focus on patients who are taking 4 or more medications.
- Margaret Colquhoun noted that it makes a very compelling argument if the data collection is revealing unintentional discrepancies when patients are on only a few medications.
- Margaret suggested that there is potential to create a "*joint communication*" using the baseline data from all CAPHC-PMRC participants that will allow for very effective messaging
- Karen stated that it would be helpful if they could share with their physicians that other centres have made the same choice to modify their criteria to include children who are taking only 2 medications
- Elaine Orrbine suggested that it may be helpful to set up a smaller group discussion with the Quinte group

Action item: the inclusion criteria from all sites will be updated and shared with all participants (JW)

Carole Cooke from Children's Hospital of Eastern Ontario (Ottawa, ON) commented that their data collection is going very well

- CHEO has obtained strong buy-in from senior management
- In addition, the new Director of Pharmacy has instituted medication reconciliation as part of his goals and objectives
- Consequently, one of challenges has been finding an area to collect baseline data

- Margaret Colquhoun requested the name of CHEO's new Director of Pharmacy and was hoping that she could contact him to consult with other teams across Canada

Isobel Boyle from Grand River Hospital (Kitchener, ON), noted that the physicians at their site were very much on board

- The team has presented the baseline data report in narrative form with some examples of unintentional discrepancies
- This strategy was very helpful and captured the interest of the physicians
- Isobel also noted that they were the first MedRec team at Grand River and currently an adult surgical team is also implementing the MedRec process

Leslie Galloway from Winnipeg Children's Hospital, noted that they have had significant support from their Medical Director and the program management team, as well as from their physicians and residents

- The program director had sent a communication to all staff explaining the CAPHC-PMRC project
- Our Winnipeg colleagues have also found narrative reports to be a valuable communication tool - their first patient example was very interesting and brought everyone to the table
- She also noted that the key to moving forward is to ensure ongoing communication with all staff
- Elaine Orrbine suggested that there may be an opportunity for a possible communication strategy to all physicians through CAPHC's partnership with the Paediatric Chairs of Canada (PCC)
- She suggested that it may be very helpful to share the report of the baseline data phase from the PMRC and use it as an opportunity to engage and share the "why" of MedRec with our physician colleagues
- This suggestion will be tabled as a possible communication strategy

What are we learning from baseline data collection?

- Elaine noted that resource challenges are being noted from everyone across the country in all interventions within the SHN campaign, not just MedRec
- She referred to the most recent SHN newsletter (Volume 2, available on the website) and noted that it includes a number of recommendations and strategies for managing the resource issues as well as for taking the BPMH
- A number of the helpful hints from the newsletter were shared
- Elaine reiterated that while the CAPHC collaborative must maintain standard data collection definitions, it is well recognized that each site will need to adapt these processes to accommodate their local teams
- JoAnne Whittingham echoed Elaine's comments and noted that some of the teams have found interesting solutions to resource challenges including using pharmacy technicians and nurses to do the BPMH
- Margaret Colquhoun agreed that it was important to enlist support from other areas, e.g. pharmacy technicians
- JoAnne also noted that Kim Streitenberger at HSC had suggested that it was also important to think ahead and plan to train all clinical staff on MedRec procedures

Q&A

Carol Cooke, from Children's Hospital of Eastern Ontario (Ottawa, ON), noted that they have the advantage of having access to pharmacy students and picking areas that already have an associated clinical pharmacist and students to work with that individual

- CHEO colleagues have been challenged with finding times that were convenient for patients/parents to complete the BPMH and are working closely with nursing personnel to resolve this issue
- CHEO has reported the average time to complete a BPMH, during the baseline data collection, was 29 minutes with a range of 5 to 130 minutes (for 19 patients)
- They also have changed the criteria of 4 or more medications per patient to 2 or more medications per patient

5. OTC medications

- JoAnne Whittingham provided a brief overview of the issues/questions shared to date
- It has been previously agreed that each organization would make the decision whether or not to include OTCs when taking medication histories
- Reasons for including OTCs include that these medications have to be ordered from the pharmacy for inpatients in most centres, that it is important to know what OTCs/herbals are being taken because of the possibility of drug interactions and, in addition, because these issues are important to families
- It was pointed out that a number of sites have suggested that the collaborative have a common strategy for the inclusion of OTCs and herbals and that perhaps a common list may be useful
- In addition we need to decide how we will document OTCs/herbals with respect to data submission and reporting
- Elaine noted that she was hoping to come up with an “*action item*” on this issue and that one goal of the discussion could be to create a common list of paediatric OTCs, collated from lists submitted from each centre
- This may also allow the collection of qualitative data that may give us additional information or new knowledge on other OTCs that are not common but may be related to specific adverse events
- Margaret Colquhoun noted that it would be very interesting to find out what the common OTCs are for the paediatric population and how these differ from the adult population
- Virginia Flintoft noted that there is an area on the data submission form to define whether or not teams are including OTCs and/or herbals in the data collection and reminded teams to insure that they are using the version of the forms with the comment section
- JoAnne noted that this form was now available on the SNN web site

Q&A

Kim Carroll-Munroe, from IWK (Halifax, NS), noted that it will be important to come up with a common strategy of how each organization will categorize and define OTCs and discrepancies

- An important issue will be to define when a medication will be classified as an OTC, e.g., for an OTC med that can be purchased over the counter and/or with a prescription
- As a related issue, we will also need to determine where OTC use of a medication may differ from the prescription use as this could affect the definition, e.g. calcium used as a supplement as opposed to a phosphate binder
- It was also noted that there may be difference in legislative issues and pharmacy schedules across the country
- Margaret Colquhoun suggested that we include prescription medications and note all OTC/herbal medications

Kim Streitenberger, HSC (Toronto, ON) noted that they are including all OTC/herbal medications because it is important to have this information and for all the reasons commented on previously. She agrees that we may need to concentrate, not necessarily on a common list, but rather on strategies for coding the OTC discrepancies

- Their team has had some discussion around coding whether or not Tylenol is ordered on admission as an intentional or unintentional discrepancy
- They have decided that for patients who are getting Tylenol at home but don't have a fever in hospital, not ordering Tylenol is coded as an intentional discrepancy
- For patients not getting Tylenol at home, but the family reports that it is used occasionally for fever this is not coded as a discrepancy if not ordered
- They have developed a coding guide to get some consistency on how the discrepancies are being coded

Sheena Mainland, Alberta Children's (Calgary, ALTA) noted that they are including OTC/herbals and have chosen not to set up a list since the adult team had already struggled with defining a list

Recommendations from participating pharmacists

- Cenzina Caliguiri, Winnipeg Children's Hospital, feels that OTC/herbals should be included since the information should be collected as part of a "best practice" medication history
- Yuen Chan-Lau, North York General echoed the comment that the purpose of the OTC is important and they are generally part of the treatment and should be included.
- She also commented on the classification of herbal products, if a patient continues to take such products in the hospital for therapeutic reasons, e.g. prevention of diarrhea, than they should be included in the data collection and any discrepancies coded

OTCs - Recommendations for Going Forward

Elaine Orrbine summarized the discussion and stated that based on today's feedback there appears to be consensus to include OTCs.

- It was suggested that some follow-up work needs to be done to develop a recommended strategy and a possible modification to the GSK. Once this is done consensus will be sought from the collaborative electronically

Action Item: A small group will work off-line and come up with a recommended strategy that will be circulated to all CAPHC collaborative members.

6. Making change: sharing and learning from each other

At this point in the call, Elaine invited a number of teams to share experiences and strategies

Patty McEwen, Clinical pharmacist, McMaster Children's (Hamilton, ON)

- Collecting baseline data since November and are reviewing 20 patients per month
- Have modified the criteria to patients taking at least one medication taken at home and they are including OTCs taken on a regular basis
- Are implementing a form that was created by a pharmacy student for documenting the BPMH and are currently vetting this through a PDSA cycle
- Considering using the tool as an order form and are also looking at recording the home medication history so that it is available electronically
- Currently documenting the entire process of what happens when a patient is admitted through emergency, what information is gathered and where it is documented on the chart
- Setting up a patient simulation, with buy-in from the staff, to test the form to address resource challenges
- They hope to be able to share the results at the next teleconference

Ryan Itterman, Children's Hospital of Western Ontario

- Noted that they have had common experiences with resource issues and physician buy-in
- Have developed an additional measure because they felt that the existing three measures only captured physician behaviour and they wanted to be able to capture and evaluate how the program is resolving the discrepancies
- This additional measure would help provide a measure on what effect the program is having on correcting discrepancies

Sheena Mainland, Alberta Children's Hospital

- Developing the MedRec form and have engaged families in the process
- Have used the adult MedRec team as a resource
- Recognized the biggest challenge to date as being the time to connect with the families
- Looking at strategies to deal with this, such as an appointment card
- Also looking at the MedRec form as an order form with a plan to include it in the electronic system currently being created
- Not limiting the number of medications in their criteria; patients are included in the data collection if they are on any medications at home
- There has been some resistance, however having physician champions has been very helpful
- The team is trying to involve more pharmacy and nursing staff in the BPMH process

Kim Streitenberger, Hospital for Sick Children

- Have just completed first PDSA cycle
- Spending lots of time in the preparation phase with lots of involvement from physicians
- MedRec is being imbedded into current processes, not changing how they are taking medication histories but rather providing a new form
- The BPMH form will be created in duplicate format and will be part of the health record from the very beginning, therefore there will be no duplicate charting
- Currently mapping out the process which has given them an appreciation for the complexity
- A FEMA has also been conducted which identified the need to look at how they can improve the accuracy of the history they are getting from the families
- Looking at a possible second intervention to introduce a standardized wallet card or medication list
- Created a one page team progress report with run charts of measures that is sent out to team members on a regular basis

Action Item: Elaine noted that it would be very useful if the members of the collaborative would be willing to share their various forms as they are developed and implemented

- All agreed to check with their teams regarding the opportunity to share these tools with the Collaborative members
- JoAnne Whittingham also suggested that these documents be posted on the MedRec CoP and CAPHC web site

Leslie Galloway, Winnipeg Children's Hospital

- Completed baseline data collection for the in-patient unit in December 2005 and for the ambulatory unit in mid-January 2006
- On their third PDSA cycle on the inpatient unit, testing and modifying the MedRec form
- The current cycle will assess the experience of nursing staff, residents and attendings using the form during admission process
- The Winnipeg team has had some discussion about using this tool as an order sheet; Leslie and her colleagues are interested in the experience of other sites as the initiative moves forward
- Have obtained parent involvement on working group and good support from parents on the unit

- Are trying to embed in current processes and practice
- Feedback from the staff is very helpful and is used to monitor the changes
- Elaine Orrbine commented that the family component is key, their involvement in the changes is really important

Carol Cooke, Children's Hospital of Eastern Ontario

- CHEO has fully implemented MedRec within their Oncology Unit
- Have a letter that is given to families explaining in initiative

Kim Carroll-Munro, IWK

- Data collection began in Nov with the nephrology population,
 - Included all patients on any number of prescription medications
 - Strategies included involving the clinical team from the beginning, giving regular updates at team meetings, and giving staff an opportunity to provide feedback and offer ideas for change
 - Have involved pharmacists from all areas of the facility as well as the quality resources team
 - The director of pharmacy is a champion of the initiative
 - Have modified the data collection forms with one of their pharmacists taking the lead on this process
 - Have developed a parent letter and are looking at strategies to ensure uptake of the importance of this information
 - Challenges have included the issue of prescriptions vs. non-prescription medications
 - To date they have been excluding some OTCs such as Tums and multivitamins
 - On a go forward basis they will consider all medications that are given at least once a week at home and will code as a discrepancy if they are not ordered
 - Medications taken less frequently will be noted but not coded
 - There has been an issue with readmissions in that it has been difficult to insure that the MedRec process is repeated on admission and the team is working on making this an easier process
 - Time constraints are an issue, in January, they averaged 62.8 minutes to conduct a BPMH with a range of 30 to 100 minutes, several factors including parent availability have been a part of this issue
 - Trying to make the form easier to use for both the pharmacists and families
 - Privacy of information obtained is an issue, particularly with respect to the birth control pill
 - Currently dealing with how best to maintain confidentiality and where do they record this information in the chart to insure that it is followed up on at discharge while maintaining confidentiality
-
- Kim noted that most of type 3 discrepancies they have identified have been route of administration related, e.g. a medication is ordered po rather than through the G-tube
 - She noted that noted that within the nephrology population many of their patients get all their feeds thru tube and may not be able to swallow or keep down any medications administered by mouth, therefore this is an obvious error
 - There was some discussion as to whether differences in route of administration should be noted as a discrepancy
 - Elaine Wong from CHEO noted that they are not making the distinction between oral and NG tube routes since the medication is still going into the gut
 - Margaret Colquhoun concurred that the medication would be counted as an oral medication no matter what the route into the gut, but referred to Kim Streitenberger for clinical implications
 - Teresa Bishara from HSC noted that they consider that the route is important because there are clinical implications in the different methods of administration including differences in the how the medications are administered and/or combined

Action Item: This item will be posted on the CoP for discussion and this issue will be tabled for the next interactive teleconference

Summary Remarks

- Margaret Colquhoun noted that she was very impressed and excited by these rapid-fire presentations and hoped that we would be able to share our experiences with others across the country via the CoP's and other communication strategies
- Elaine Orrbine, encouraged all teams to consider sharing their respective documents and experiences, and suggested that these items get posted to the Paediatric CoP

Wrap-up; timelines, next interactive teleconference, closing remarks

- Elaine reviewed the timelines as follows;
 1. **September to December 2005:** Getting started and launching a successful campaign within your Site; developing teams and engaging key stakeholders.
 2. **January to February 2006:** Collecting baseline data; beginning to implement change.
 3. **March to April 2006:** Moving into the pilot implementation stage and determining how processes can be changed to ensure successful implementation and integration of medication reconciliation.
 4. **March 2006:** Baseline data will be evaluated and reports submitted to all participating centres and the *SHN! Campaign* Steering Committee.
 5. **May to October 2006:** Full implementation of medication reconciliation
 6. **October to December 2006:** Evaluation of the results, dissemination and exploration of new QI models for care
- It is anticipated that baseline data from all centres will be completed by the end of March
- Elaine noted that our Paediatric Collaborative is developing an exciting model that can be adapted for other quality improvement initiatives in the future
- Elaine thanked everyone for their participation and contributions to our second interactive teleconference and congratulated everyone on their tremendous accomplishments to date!
- The third interactive call will be scheduled at the end of April 2006. The agenda will include rapid-fire presentations, report on baseline data and moving toward the pilot and implementation phases of the campaign.

The teleconference was adjourned at 2pm EST.