

CAPHC-SHN Paediatric Medication Reconciliation Collaborative
Fourth Interactive Teleconference
Measuring Our Success to Date
Sept 21st 2006

Speakers: Elaine Orrbine (Chair) – President & CEO, Canadian Association of Paediatric Health Centres
JoAnne Whittingham – CAPHC National Patient Safety Coordinator
Margaret Colquhoun – SHN! MedRec Lead, ISMP (Canada)
Dr. Ross Baker – Chair, SHN! Central Measurement Team

1. Introduction and Welcome (*Congratulations to all teams!*)
 - Elaine Orrbine introduced the speakers and welcomed all participants to the fourth interactive teleconference
2. Adoption of Agenda and Approval of the May 25th, 2006 Teleconference Summary
 - Elaine noted that any additional information with respect to the pre-circulated agenda or any errors and omissions in the minutes from the May 25th teleconference could be brought forward during today's call
3. Paediatric Medication Reconciliation Collaborative - National Summary of Baseline Data
 - The purpose of the *Paediatric Baseline Data Summary* is to share, from a collective and descriptive perspective, what the baseline data is showing
 - The report represents a significant sample of patients from a variety of patient populations with baseline data from 18 teams representing a total of 32 months of submitted data
 - Twelve teams have also submitted implementation data - future reports will describe the change in the measures from baseline through early implementation once all teams have submitted implementation data
 - Elaine reviewed the data analysis plan developed in consultation with Virginia Flintoft of the Central Measurement Team and Margaret Colquhoun at ISMP Canada
 - Due to the recognized challenges of collecting monthly audit data, the data are not reported on a monthly basis since the numbers can be small and will not illustrate the importance of and need for MedRec
 - The clustered data represent a substantial volume of patients reviewed (434 patients) across all teams, from a variety of patient populations, including children admitted to paediatric wards in community hospitals to more complex patients including nephrology, mental health and respiratory medicine
 - Elaine reviewed the definition of Type 2 discrepancies and noted that the collective data show that approximately 50% of patients reviewed had an undocumented discrepancy identified
 - The definition of Type 3 discrepancies was also reviewed - across all baseline data submitted more than 50% of patients had intentional discrepancies identified
 - The clustered data clearly indicates that there is an opportunity to make change and provides a strong message for teams to share with their staff and senior leadership
 - The individuals and teams that are leading the MedRec quality improvement initiative have the most significant role in implementing a system wide change that will create a safer environment for the children and youth that we care for across the system

- The Success Index data will be described in future reports – it was felt that it was too early to report on this measure as it's purpose is to illustrate change over time
- Elaine reviewed the importance of sharing experiences and stories - a collection of real life situations, from PMRC members, have been created and two of the stories were shared that illustrate the need for MedRec
- JoAnne will send out the collection of stories with the teleconference minutes

- Ross Baker congratulated the paediatric centres on their level of participation in collecting MedRec data
- The Central Measurement Team is sharing with teams the importance of viewing the data, not just as a report to the SHN! Campaign, but also as having a great deal of utility on a local basis to create support within units, to judge unit progress, and to guide the changes to make the MedRec process more effective
- Ross agreed the collection of real life stories was very valuable to establish the ongoing need for MedRec
- He acknowledged that there are significant pressures on resources and noted that as teams make changes that show improvement the data will allow them to make a clearer case that the MedRec process is important to insuring appropriate medications are being prescribed
- As well, the data (national and local) will enable teams to make the case to senior leadership to support the extra resources that are needed
- Margaret Colquhoun noted that, from her experience with MedRec teams (156 teams) across the country, senior leadership is very important to the process and some teams do not have that support
- Margaret stressed that we need to use these data to obtain more support and buy-in from senior leadership and physicians - if there are one in two patients who have an unintentional discrepancy there is the portion of those discrepancies that could cause an adverse event as illustrated by the real life stories provided
- She noted the achievements and commitment of the CAPHC Collaborative and congratulated the paediatric group
- She suggested that some of the stories be posted on the Community of Practice (CoP) in order to generate more discussion about the potential for patient harm

Paediatric Medication Reconciliation Collaborative – National Survey

- JoAnne Whittingham reviewed the results of the survey
- Both Elaine and JoAnne congratulated all the teams on the 100% response to the survey
- The survey addressed the participating sites on the make-up of their MedRec teams
 - In terms of overall team make-up, the primary disciplines involved are nursing, pharmacy and staff physicians, although teams are also including other disciplines based on what works in each centre – other disciplines include quality improvement experts, residents, decision support and family representatives
 - Responsibility for overall co-ordination of the MedRec initiative is primarily carried out by nursing, pharmacy and quality improvement experts with one team being led by a physician
 - The BPMH is being done by pharmacy in majority of the sites, this correlates with the observation, made in previous conference calls, that pharmacy resources are key to this initiative
 - The step of reconciling medications is primarily seen as a pharmacy responsibility however it was noted that other teams have trained additional staff to this role, e.g. nursing, depending on what works best within each setting

- The responsibilities of collecting the data are more diverse with the primary disciplines being pharmacy and quality improvement leaders with nursing also taking a lead role on some teams-
- It was noted that pharmacy was responsible for all three roles, the BPMH, reconciling medications and collecting data, on 7 of 18 of the teams
- Data collection has been identified as a significant resource challenge for the paediatric teams and right across the SHN campaign in all 6 interventions
- It was also noted that teams at smaller centres can also have problems with finding enough patients who meet the inclusion criteria

- The survey demonstrated remarkable progress across all participating sites
 - Teams are working developing and finalizing their MedRec forms
 - There was a concern noted that several teams have reported that they have not set up a system of regular reporting to unit staff and physicians
 - The importance and integral role of regular communication with all staff was recognized by all
 - All teams were encouraged to consider setting up a communication system, e.g. specific newsletters, posters on the unit, small articles in regular newsletters
- With their experience to date, the overall perception of the teams and the unit staff is that MedRec is important to system wide change in patient safety
- More than 50% of the teams indicate they have been able to integrate MedRec into existing workflow and are starting to see evidence that MedRec is reducing redundancy
- A lower percentage of responses indicate that unit staff are seeing a reduction in redundancy - this is likely because teams are still in early stages of implementation of the MedRec process
- A review of success factors show a number of factors that stand out including; team work among the disciplines, organizational culture that promotes quality improvement and patient safety, and access to pharmacy resources
- Also noted as success factors were active executive leadership, having strong physician champions and the involvement of quality improvement experts
- The need for ongoing staff communication was also reinforced as a success factor, as noted by the majority of the teams
- Other interesting success factors include lots of education, the team leader having a strong presence on the unit and involvement of the ward unit clerks
- It was noted that only a few of the teams rank having a pharmacist doing the BPMH as vital to MedRec – illustrating that other staff members can be trained to take on this role, e.g. nursing, residents or pharmacy interns
- Barriers that came out in the survey were factors that have been previously discussed including the need for more human resources, finding time to meet with families, and limited medication history from families
- Teams have been working to find ways to resolve the barriers including creating parent information letters and educating families about bringing all information on their child's medications

- Elaine noted that sharing and learning from each other is the key to our success, using examples from each team can help other teams resolve barriers in their own centres
- She suggested that the survey is a tool we will continue to use as way to communicate and provide sharing and learning opportunities
- Ross Baker noted that the information provided by the survey complements the baseline data and is very positive in addressing team progress and success
- He noted that the list of barriers are similar to those found in the other initiatives and that it is encouraging to note that teams are starting to integrate MedRec into existing processes

- Integration is critical as teams move forward from piloting MedRec on a small scale to making it part of how things are done on a regular basis
- Ross suggested that it would be interesting to pose the survey questions again, as well as some additional questions, in the next few months to get a sense of what teams are doing to overcome the logistical and human resource barriers, as well as how they are engaging other members of the team and senior leadership
- Margaret Colquhoun noted that the teams should be using CoP as much as possible
- Teams can use the wealth of information available to tackle barriers, saving time and effort by using the tools that other teams have developed, e.g. information forms used to engage families and the package of information created by Northern Health in BC
- Margaret noted some additional examples of the type of information available and encouraged all the teams to use this resource

Q&A

- Kim Streitenberger, Sick Kids Hospital, noted that the survey information helped their team to get a feel for what other teams are doing
- Trey Coffey, Sick Kids Hospital, suggested that it would be useful to breakdown the data into types and characteristics of institutions since the challenges and strategies to resolve them will vary
- JoAnne suggested that she could take a look at the data to determine if this was possible given the small sample size
- Trey also queried what was meant by shared roles, for example between pharmacy and nursing staff
- JoAnne explained the survey answers did not provide that level of detail, however a number of participants on the call were able to provide examples
 - Pat Overholt, Credit Valley Hospital, noted that she (as a nurse and the team leader) obtains BPMH and the pharmacist makes contact with the physician to clarify orders
 - Margaret Colquhoun noted that sharing roles depends on the clinical population and the type of institution, e.g. one staff member may start the BPMH and then pharmacy may be called in to consult
 - Cenzina Caligiuri, Winnipeg Children's Health Centre, noted that in their MedRec process the physician does the primary reconciliation and questions left unresolved are followed up by pharmacy. The pharmacist also does a double check on the initial reconciliation
 - They also have a process for nursing staff to do a double check on the medication history
- Maria Golberg, Stollery Children's Hospital, asked about teams that have been able to integrate MedRec into existing workflow – they have a separate form for MedRec and for the admission history and the team has been struggling with integrating the processes
 - Richard Jones, London Health Sciences, noted that their pharmacists already made notes in the chart with respect to activities and medication recommendations - with the MedRec process they have created a specific location for recommendations in the chart where nurses and physician make progress notes - this allows everything to flow together in one common spot and it is very helpful for optimal communication.
 - Leslie Galloway, Winnipeg Children's Health Centre, noted that they have taken “all best advice” and are in process of an implementation strategy which is integrating into current work process
 - They have created a “*Child Health Home Medication Reconciliation Physician Order Sheet*” – the form will become the order sheet for home medications
 - Residents are completing this form, rather than recording the home medication information on the admission history and physical

- As well, nursing is no longer recording the medication history on the nursing database but rather are using the new sheet as the recording tool
- The senior resident or attending physician is doing the reconciliation and nurse on the unit is reviewing it with the family before it goes on to the pharmacy
- As they implement this process they are already seeing an improvement in the quality of the medication histories
- Leslie noted that the process is not asking anyone to do anything extra or different but rather are structuring it onto a different form
- Margaret noted that, in Boston, the integration of MedRec into existing processes has been noted as one of the primary keys to success and encouraged teams that have successfully integrated MedRec to post their strategies on the Community of Practice

4. Data Collection Challenges – Sharing Successes

Isobel Boyle, Grand River Hospital

- They have submitted 8 months of data with approximately 20 patients per month reviewed
- The team is fortunate to have a clinical pharmacist on the paediatric unit – this has been key to their success
- The pharmacist reviews the charts, flags the patients meeting the criteria, begins the MedRec form and completes the BPMH - this takes about 10 to 15 minutes
- At month end the audit sheets are tallied and Isobel collates the data for submission to CAPHC
- Their strategy has been to keep everything as simple as possible and they have concentrated on giving a lot of feedback to everyone that is involved
- They are now at the point of educating the nurses to do the BPMH and have instituted a form for the parents to complete
- Isobel has found that because they are catching discrepancies the staff are recognizing that it is worth the 10 to 15 minutes to the process takes
- The team is almost ready to do a complete “fan out” to all patients and other areas of the hospital are interested in instituting MedRec

Darlene Boliver, IWK

- IWK has 3 MedRec teams that are all operating a bit differently
- In paediatric Nephrology the team have submitted baseline data and 7 months of ongoing data and in Inpatient mental health baseline data and 3 months of ongoing data have been submitted
- High level support has been important to their success - IWK's new strategic plan and the report to the community was just released and outlines patient safety as a stated core value
- This rollout includes information on patient safety initiatives including MedRec
- The team was profiled in the Safer Healthcare Now! magazine which served to bring value, profile and encouragement to the team
- Similar to Winnipeg Children's they have developed an admission medication history/order sheet and all staff taking patient medication histories record on the same sheet which turns into the physician order form
- The form has been approved and they have been given 6 months to tweak it based on lessons learned
- Karen Comeau from Mental Health explained some of this team's strategies
 - On this unit the front line nurses do the data collection and the responsibility for data collection has been delegated to the charge nurse
 - The clinical leader and QI coordinator provide reminders and supports
 - They have included the blank MedRec form in admission packages, as well as posting the blank forms in a high profile area in the nursing station

- There is no dedicated time for the MedRec initiative, the staff work together to make sure the forms are completed in a timely manner
- They have seen some value from the data collection, reviewing dips in the success index and linking them to vacations and shortages on the unit provided valuable information to the team
- IWK colleagues strongly support the need for constant staff communication and feedback, and have a variety of mechanisms, including a continuing learning website
- The website includes a bulletin board for MedRec questions, MedRec PowerPoint presentations, audit results on the data collection tool and a MedRec challenge quiz

Richard Jones, London Health Sciences Centre

- The Children's Hospital of Western Ontario is a hospital within a hospital, therefore they have the double responsibility of implementing MedRec in both paediatric and adult venues
- The Safer Healthcare Now campaign overall is managed through the Risk Management Group and the team is working closely with the pharmacy patient safety specialist in that group
- The Director of Patient Care for the Children's Hospital is also a strong advocate for MedRec
- The pharmacy team in paediatrics had one highly motivated person who took charge of project
- They had a good starting point in that the pharmacy team was already responsible for doing medication histories as patients were admitted, generally focussing on patients on several medications
- The pharmacist lead presented the case for MedRec to the care team/family leadership group that the hospital uses to make strategic and some operating decisions
- There was overwhelming endorsement from the committee, particularly from the family side, which proved to be helpful in engaging any staff who were sceptical about the value of MedRec
- Currently pharmacists screen for patients who can benefit from MedRec and do the BPMH
- The data are tabulated on a monthly basis, they have adjusted the template form to their needs
- Results are reported monthly to the Risk Management Group and CAPHC and at least semi-annually, the aggregate results go to the Pharmacy and Therapeutics committee
- MedRec has also spread to adult Mental Health. To date, this unit has collected baseline data.
- Richard noted that MedRec is already a component of the pharmacy care model and that the initiative is allowing them to create a key tool for allowing pharmacists taking the history to concentrate on what they need to focus on quickly from a discrepancy perspective
- The other advantage of the MedRec campaign is that it has provided a metric to measure progress

5. Update from the SHN! Medication Reconciliation Faculty (Kim Streitenberger)

- Kim reported that the MedRec faculty had a very interesting meeting focussed on changes to the Getting Started Kit (GSK).
- The changes were based predominately on very helpful feedback from teams
- The revisions to the GSK are focussed on getting started with MedRec rather than increasing spread and sustainability
- It was felt by the faculty that it would be better to focus on spreading MedRec, in the form of a supplement to the GSK, once more evidence is available that each organization's processes are working well
- The revised GSK will have three chapters - admission, transfer and discharge
- Overall the concepts and language in the GSK will be simplified
- Measurement was discussed in great detail and it was decided that there would be no changes in the core measures
- Kim noted that the faculty recognized that other teams are collecting additional measures that are helpful to individual teams needs.
- These examples will be referenced in the GSK

- In anticipation of the final version, Kim requested some volunteers to provide reviews of the revised GSK from a paediatric perspective and asked anyone interested to forward their name to JoAnne or Kim
- Kim reported that the faculty has also discussed with CCHSA the implications of the required organisational practices with respect to MedRec
- The faculty has agreed to provide ideas for how CCHSA accreditation assessors should be assessing compliance with this requirement
- The MedRec faculty would welcome any ideas from teams in this respect as well
- CCHSA recognizes that the bar has been set very high for demonstrating that MedRec procedures are in place – this has been done intentionally to provide organizations with some sense of urgency
- Elaine noted that CCHSA has acknowledged their renewed commitment to recognizing the uniqueness of the paediatric population and has just signed an memorandum of understanding with CAPHC to develop national standards for child health

6. Implementation of Medication Reconciliation: sharing and learning from each other

Janet Whalen, Quinte Health Services

- Initially the team met with significant resistance from the physicians
- Physician buy-in and participation is improving based on evidence of documented intentional discrepancies and the team has noted less negative comments at regular meetings
- There were some issues around using the criteria of patients on two medications or more, however, baseline data has demonstrated that discrepancies were being found at this level
- Pharmacy is doing the BPMH and they have had some challenges with pharmacy staffing
- Another challenge has been the short length of stay on the paediatric ward therefore it has been necessary for pharmacy to do the BPMH very quickly
- They are now moving forward training pharmacy technicians to do the BPMH as a solution to the lack of resources in pharmacy
- Engaging nursing staff has also been a challenge, particularly getting them to notify pharmacy when there is a patient that meets the inclusion criteria
- Overall, team members are pleased with the progress of the team and are committed to implementing the intervention

Maria Golberg, Stollery Children's Hospital

- The team has recently added "bed coordinators", who are very helpful in alerting the team to admissions so that the MedRec process can be started
- In addition, a paediatric nephrologist, whose patients tend to be on a lot of medications with discrepancies being common, has joined the team and has been instrumental in moving the process along
- The team's experience has indicated that the primary focus should be on children with long term complex health problems - physicians who care for patients with complex needs who are receiving multiple medications are valuable additions to MedRec teams
- The team have adopted an existing MedRec tool and nursing staff are responsible for filling out the medication history
- The physician then documents whether the medication should be continued, changed, discontinued or held, with the rationale being provided
- This is enhancing communication between medicine and nursing with respect to with home medications
- It is hoped that this form will become the order sheet in the future
- Currently they are focusing on patients admitted through the paediatric ER to the nephrology unit and the general paediatric medicine unit

- To avoid confusion as to what patients should be included, the goal is to complete a form for each admission
- The team is somewhat disappointed with the number of forms that are being completed so far, however, awareness of the importance of MedRec has definitely improved
- MedRec is viewed by the nursing staff as extra work and another piece of paper to complete, however a detailed review of the average number of medications that patients are on has demonstrated to them that MedRec is, in fact, not a lot of extra work and real life examples have also helped with buy-in
- Maria is also planning to engage a core group of nurses in the ER and facilitate them as champions to work towards changing culture
- More support from physicians will also be important to pursue
- Maria was also very interested in the idea of engaging families and would like to work towards more publicity, such as television spots, that would educate families about the value of keeping track of information on their child's medications and the value of MedRec
- The team started implementation at the beginning of the summer, which was not optimal because of vacation schedules
- She was intrigued that other teams are including residents and will pursue exploring this option at Stollery
- Maria noted that data collection was time consuming but important, particularly for demonstrating to staff the value of the MedRec process
- They are also working on developing a portable health planner for parents and will be holding a focus group with parents in October

Anne Compton and Judy Komori, BC Children's Hospital

- Their MedRec pilot has been on patients admitted from ER to in-patient units (8 to 15 per day)
- It took the team some time to decide who would do the initial medication history because the physicians already had a process in place
- The pilot process developed was for nurses to do the initial medication list once the patients were through triage
- The form they designed was well received by the nurses, physicians and families
- It was determined that reconciliation would be done once the patient was on the ward and Oncology has volunteered to be the unit where the process would be piloted - the team has been working with this unit
- At this point the team is focused on educating the nurses on the ER and the oncology unit – they are fortunate to have a nurse champion from the oncology unit taking on this task as well as doing the auditing
- They have created a laminated poster and a generic PowerPoint presentation for education on the units
- A multidisciplinary team from each area is important to their success as well as being very flexible in terms of scheduling meetings
- The team is still having some challenges with physician involvement and with integrating the process into the electronic system

7. What's next?

- Elaine thanked all of the rapid fire presenters and noted that there were a number of messages and key strategies identified throughout the call
 - The importance of senior leadership engagement has been an ongoing theme – the key strategies and messages should be communicated to this group
 - Solutions that other teams have shared can help to resolve challenges for all sites

- Communication and feedback to staff as well as celebrating success sustains the momentum
 - Teams are having a positive impact on making implementing change on a system wide level
 - Families are key advocates, their input should be recognized by health service providers – this should be a strong message to senior leaders
 - A substantial volume of patients (434) were reviewed during the baseline data phase and the data and the real-life stories indicate that there is a significant problem - approximately 50% of patients reviewed had an undocumented discrepancy identified and more than 50% of patients had intentional discrepancies identified
 - Resources are key to this initiative, particularly pharmacy resources, although it is also recognized that other disciplines can be trained to take on these roles
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- In closing, Elaine highlighted the recent bulletin from SHN about the continuation of the campaign and stressed that there will be “long life” in our paediatric patient safety initiatives past December
 - A number of events are being planned over the next few months
 - In partnership with CPSI and Medbuy there will be an opportunity for all paediatric healthcare centres to join a satellite broadcast of the IHI annual meeting on Dec 12th and 13th
 - Elaine noted that she was looking forward to seeing everyone at the annual meeting and noted, in particular the patient safety symposium, *Promoting Patient Safety and Best Practices in Paediatrics through Standardization of Medication Practices and Delivery Protocols*, being held on October 15th and directed all to the program on the CAPHC Website
 - A spring workshop is being planned for the paediatric MedRec group
 - The workshop will be designed to explore what we have learned to date, key challenges and implementing change
 - Senior leaders and decision makers will be invited to participate

Elaine thanked everyone for their participation and contributions to our fourth interactive teleconference and congratulated everyone on their tremendous accomplishments to date!

The fifth interactive call is planned for the New Year

The teleconference was adjourned at 2 pm EST

The date of the fifth interactive teleconference will be confirmed in the coming weeks