

Implementing Medication Reconciliation:

Easier said than done

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Project Overview

- Funded by the Canadian Health Services Research Foundation and Canadian Patient Safety Institute
- Nationwide team
 - Partners include CAPHC, Accreditation Canada, ISMP Canada
- Purpose: to examine barriers and facilitators to 3 widely recommended patient safety practices
 - Safe handling of concentrated potassium chloride
 - Medication reconciliation (Med Rec)
 - Computerized provider order entry



Medication Reconciliation

- CAPHC wanted to explore challenges of implementation reported by Medication Reconciliation Collaborative
- Participation by 15 of 18 centres in Medication Reconciliation Collaborative Interview ~5 implementation team members at each centre:
 - Team leader, pharmacist, nurse, physician, quality/safety officer, senior administrator
- Semi-structured 45-minute interviews
 - 34 interviews conducted at pediatric centres



Interview Questions

1. What factors that led to the decision to implement MedRec?
2. Were major process or system changes required?
3. What are the nuts and bolts of the process at your institution?
4. What were the major barriers and facilitators encountered?
5. How was the impact of the MedRec process evaluated?
6. Has anything significantly helped or hindered sustainability of your hospital's MedRec process?
7. What would you do differently with respect to the way in which your institution implemented MedRec?



Qualitative Methodology in Brief

- Two project members read sample of transcripts
 - Created independent list of conceptual themes
 - Reconciled in discussion with core project team
- Coding scheme applied to next set of transcripts and modified as necessary
 - Check for coding agreement after next iteration
- Once agreement consistently achieved, then rest of transcripts coded for themes by single investigator



Impressions of Experience

- Two team members also rated interviewees' overall characterization of experience on 5-point Likert scale
 - One rating for success and another for ease of implementation
- ❖ *Using these ratings, 3 institutions appeared to have succeeded*
- ❖ *Ratings generally agreed across interviewees from same institution*
 - Few interesting exceptions



Barriers and facilitators

Facilitators

- Sharing between institutions
- Executive support

Barriers

- Project support/resources
- Resistance from physicians, nurses
- Competing priorities
- Data collection
- Staff turn-over
- Degree of computerization

Mixed Barriers/Facilitators

(double-edged swords)

- Accreditation
- Composition of team
- Data feedback
- Existing processes
- Project champions
- Pharmacy leadership



Barriers: Insufficient Resources

- Much more complex and resource intensive than anticipated by hospital management and implementation team
- Few teams given new resources
- Resources almost always temporary
- *“Number one, you need to not underestimate the complexity of process”*
- *“It's about resources... realizing how complex it is and the constant monitoring you need to do to keep it going”*
- *“Many of these tasks have fallen onto the shoulders of nursing... The effects on the available resources should have been anticipated and support put in place”*



Competing Priorities

- Organizations have many competing projects and priorities
- Med Rec not always prioritized by executives, management and staff
- Front-line personnel feel overburdened and understaffed
- *“I think there is quite a lot of skepticism as to if this is really where we should be diverting our resources.”*
- *“ With the limited Pharmacy resources that we have, where should we be spending the balance of our time?”*
- *“It was another piece on top of everything else that we were doing.”*



Physician buy-in a common problem

- Added work, not my job
- Resistance to change
- Poor attendance on implementation teams
- Difficult to find one physician who speaks for all physicians
- Physicians do not work for the hospital, so difficult to make them do anything.
- Often based outside hospital
- *“Lack of physician involvement is huge. It's the elephant in the room”*
- *“It's a challenge getting them to the meetings and truly engaged”*
- *“Try and find a physician who speaks for all the physicians, I've never seen one.”*
- *“Most of the surgeons are private practitioners—each comes with his/her own beliefs and it was quite difficult to gain unanimous support for the program.”*



Nursing buy-in more variable

- Almost everyone agreed burden mostly fell to nursing and that their buy-in was essential
- Added work
- Lack of time, resources to educate nurses effectively
- *“...it added extra work for nursing staff, which showed us a bit of resistance”*
- *“It was still perceived as something that was an add-on...so it didn't necessarily create uptake and enthusiasm”*
- *“Because of the number of nurses that are involved...it seems like they don't get enough education. They will tell you “Well, I've seen the form. I'm not very comfortable doing it.”*



Data Collection

- Majority of participants struggled to find time for data collection
- All felt a valuable thing to do, but when time and staff were already scarce for doing MedRec, even more difficult to find time and staff to collect data
- *“bogged us down...it seems that we’re putting more energy into evaluating and not enough energy into continuing to reinforce implementation and system changes. And it became very difficult because there was no added resources”*
- *“We have been doing this on top of other responsibilities. So, that was probably one of the barriers...we have to make some choices. We don't audit monthly, we audit when we can.”*



Staff turnover

- Many comments about high turnover rate in healthcare in general, but especially in academic centres
- Caused communication problems and made ongoing education critical
- Made generating momentum difficult
- *“Well this is a teaching hospital... There is huge staff turnover. The nurses rotate, the doctors rotate...”*
- *“You've got new staff coming and going and you know that's part of our communication and education [problems]... We've tried everything... rounds, site meetings, medical advisory meetings—anywhere we can to get the message out but I mean its only just so much.”*



Turnover of Implementation Team

- Many comments about issues with turnover of staff on implementation team
- *“One of the other barriers was the number of new members to the team... Every time the team reforms there is a redefinition of roles and redefining what medication reconciliation is ”*
- *“It was a matter of...resurrecting it and making sure that it could run independently of an individual. And so, turnover was one of the biggest delays and challenges.”*



Degree of Computerization

- Many discussed desire to computerize MedRec
- Integrate into workflow with minimal disruption
- Existing systems often not compatible with process of computerizing MedRec or caused new problems attempting to do so
- *“...electronic systems would make it easier ... in terms of accepting the process of medication reconciliation as part of their job”*
- *“It meant that we were going back to paper documentation whereas we were doing our medication entries through MediTech. So it was a step back for us”*
- *“We have electronic charting, so we tried to build a version on it. But...it isn't communicating with the electronic medical record the way we'd wanted”*



Facilitators: Executive support

- Strongly related to resources
- Accreditation and SHN campaign helped to gain executive support
- Most executives supported project, but important distinction between support and endorsement
- *“Having the leadership support is huge, huge, huge... on the program management level all the way down to a unit manager”*
- *“[Executives] don't consistently come to the meetings, but they try to get there whenever they can, and they are certainly the partners of the project.”*
- *“Part of why we had the executive support...is because the organization had decided that they were going full speed ahead with the six initiatives from Safer Healthcare Now”*



Facilitators: Sharing between institutions

- Formal and informal sharing between institutions
 - Hospital partnerships, Communities of practice, CAPHC collaborative calls
- Opportunity to learn strategies for dealing with barriers as well as comfort of knowing that problems are shared
- *“the communities of practice and the support we get from other people is amazing”*
- *“One of the best things that happens is understanding that we are not the only one that may be facing these barriers”*
- *“A very, very valuable thing that [CAPHC, SHN] have done is to bring people together, so that you have a venue and a forum to talk about ideas and potential solutions and to share information about successes”*



Mixed Barriers-Facilitators: Pharmacy Leadership, Project Champions

- Pharmacy leadership sometimes created perception that MedRec is the responsibility of Pharmacy
 - decreased buy-in from others
- Burn-out for pharmacy staff
- Important to present MedRec as a responsibility to be shared across disciplines
- Same issue with project leads/champions
- *“It’s getting a lot of pushback. It’s seen as pharmacists now trying to download their work to others because pharmacists have been doing it for two years and now we’re saying it is a shared responsibility”*
- *“A lot of the responsibility is falling on Pharmacy and they feel that there are other people that should be stepping forward and taking a more significant role as well.”*



Barriers/facilitators: Accreditation

- Helped gain executive support and staff buy-in
- But, sometimes led to rushed implementation process with emphasis on accreditation requirements rather than specific needs of institution
- Drop in enthusiasm after accreditation
- *“Instead of doing it for the wrong reasons, because accreditation tells us we have to, we want to make sure we've got the right support, we've got the right mechanism pictured out, we've got the right process [figured] out and the units have the appropriate education and are ready to move [forward]”*



Barriers/facilitators: Existing workflow

- Fine balance
 - Good to work within existing workflow so that adoption is easier and less resistance is encountered,
 - But, existing processes often have many problems
- Whether to tailor process to each unit's workflow
 - Facilitates adoption on each unit
 - Sometimes a barrier from management perspective since no standardization between units



Other Mixed Barriers/Facilitators

- Team composition and participation
 - Well-functioning multidisciplinary teams important facilitator
 - Too many people a barrier (eg, scheduling difficulties)
- Pilot unit: Learning from pilot essential to plan for spread
 - If pilot goes well, facilitates buy-in in other units, if not it can be a barrier to buy-in
 - Fine balance between starting small, and starting too small
- Data sharing
 - Audit data and ‘good catch’ stories can help gain user buy-in
 - Discouraging if data show no improvement



Widely Recommended Improvements

- Accurate estimation of required resources
- Have all stakeholders on board
 - Use local data to demonstrate need for Med Rec
 - Many suggestions for nursing and pharmacy to co-lead
 - Various suggestions about gaining physician buy-in
- Triage so Pharmacists only get complex cases
- Various other less unanimous suggestions
 - E.g., computerization, patient/family involvement



Conclusions

- Much more complex and resource intensive than expected
- Many common barriers and suggestions for solutions
- Common trade-offs encountered
 - E.g., Pharmacy leadership, designing process to fit within existing processes, computerization



If you had a chance to do it over again,
what would you have done differently?

“Everything...Because where we are today is not anywhere near where I thought it was going to be two years ago...medication reconciliation looks like this pleasant little puddle, but it is very deep.”



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