Towards a Learning Health Care System
Experiences in Kootenay Boundary

Jennifer Ellis, QI Manager, Kootenay Boundary Division of Family Practice
March 6, 2020
Kootenay Boundary

- 78,000 people
- 93 GPs and 6 NPs in family practice
- 49 ED physicians, hospitalists, locums, GPs/NPs in focused practice
- 50 specialists
- 26 primary care clinics
- 3 hospitals with inpatient beds
- 3 health care centres with EDs open in daytime only
A Learning Healthcare System

“science, informatics, incentives, and culture are aligned for continuous improvement and innovation, with best practices seamlessly embedded in the delivery process and new knowledge captured as an integral by-product of the delivery experience.”

Institute of Medicine, 2015
Principles of a Learning System in KB

**QI not QA**
The data is a conversation starter. Establish a blame-free culture that allows falling forward.

**Data literacy based**
Talk about the data. Explain what things mean and how they were measured. Discuss uncertainty.

**Voluntary but value-add**
Bring people along by helping them to see the value of the work and information. Get feedback on approaches.

**Data and tool democracy**
Share data openly with safeguards. Build and share a library of tools to enable shared language and common approaches.

**Sufficient resourcing**
Data collection, analysis and sharing takes time and money. This cannot be done off the side of a desk.

**Imperfection is expected**
And accepted. The data is messy. The tools are imperfect. Some things seem unmeasurable. But there is a need to move forward.
## Principles of a Learning System in KB

<table>
<thead>
<tr>
<th>Outcomes focus</th>
<th>Measure twice (or more)</th>
<th>Ground in the literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand what you are trying to achieve and how you will know change is an improvement. Logic models!</td>
<td>Use a diverse set of measures to triangulate, tell a robust story and account for the unexpected.</td>
<td>You’re probably not the first to try to do something. Learn what you can from the experiences of others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relationships enable</th>
<th>Disaggregate data</th>
<th>Decentralization and Self-management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust is integral to data sharing, data collection and discussions about outcomes, progress and mistakes.</td>
<td>The data must be as disaggregate as possible enabling people to see themselves within it while still preserving trust and privacy.</td>
<td>A learning system cannot be top down. Ideas must flow up and down and local people must be empowered to self-manage.</td>
</tr>
</tbody>
</table>
Embedded evaluators and QI coordinators
- Builds relationships and trust
- Keeps the focus on data, outcomes and learning
- Enables formative evaluation and regular feedback loops

Protected budgets for QI and evaluation
- Creates buffer and allows for experimentation
- Ensures evaluation always happens
- Evaluation, QI and data sharing becomes an organizational norm

Evaluation and QI roles separate from project management
- Project managers do not plan or execute evaluations and evaluators/QI coordinators do not project manage

Physician leaders in data sharing and literacy
- "I'll show you mine, if you show me yours" - normalizes results
- Sessional supported
Structures of a Learning System: Tools

05 Regular data and QI "events" part of all initiatives
   - Learning labs and Regional QI meetings establish regular reflection
   - Facilitate data sharing, data democracy and data literacy
   - Allow for a refocusing of action around outcomes and data

06 Regular "Report on Outcomes" with 20 indicators
   - Keeps focus on outcome indicators vs. process or output indicators
   - Opportunity to review what we know, and explore what if any utility that provides

07 Evaluation and QI tools and frameworks
   - Toolkit of frameworks, surveys, consent forms, reports, logic models, info sharing agreements and indicators developed collaboratively

08 Routine data collection using standardized tools
   - Annual member survey, patient surveys, project check-ins
   - Makes data collection just a part of doing business
   - Moving towards more automated EMR data analytics
09 Commitment to and funding for sharing learnings
- Commitment to sharing findings, tools developed, approaches and experiences to multiple audiences

10 Data relationships and communities of practice
- Establishing partnerships to access data, share data and collect data
- Communities of practice enable learning and sharing of tools

11 Partnerships with research organizations
- Expand our reach, bring in new expertise and enable innovative projects

12 Provincial working groups and pilots
- Ability to engage in provincial discussions
- Opportunity trial new tools and approaches
Culture enables structures and Structures create culture
Kootenay Boundary Learning System

- QI not QA
- Voluntary but Value Add
- Outcome Focus
- Self-Management

- Embedded QI Coordinators and Evaluators
- Protected and Sufficient Budgets
- Physician Leaders

- Regular Data and QI Events
- Robust Toolbox
- Reports on Outcomes
- Regular and Automated Data Collection

- Data Partnerships and Communities of Practice
- Sharing Learnings
- Partnerships with research organizations
- Pilots

Culture of Learning
QI Coordinators and Coaches for each clinic
0.8 FTE for QI Eval for 12 clinics
PCN Clinic Leads

QI and Evaluation Framework
12 outcomes and 37 indicators
Patient Experience Survey
n=1500
Tools for measuring access, team & PROMS
PCN Learning Lab
CPCSSN for EMR analytics

Burnet Institute Data Relationship
IH PCN Evaluation Community of Practice
Research projects with UBC and UVic
MoH Data Linking Pilot
Building a Learning Health Care System Provincially

- Establish enabling frameworks
- Support learning networks and communities of practice
- Establish mechanisms for knowledge succession
- Make data easily accessible
- Enable top down and bottom up learning
- Allow for local innovation
- Fund internal and external data analysts
- Establish key indicators collaboratively
- Include all stakeholders
- Create a toolkit with standardized measures
- Incentivize data collection and reflection
- Eliminate data silos and enable data linking
- Allow for local innovation