Rationale

- Faculty, Learners, Patients and Health Care System components need access to good data to understand “present status” and to accomplish quality improvements.
- A hand-held data base could provide immediate access to learner data, curriculum data, patient data and system data.
- Faculty, Learners, Caregivers, Administrators, and Patients need answers to critical questions quickly and accurately if our teaching, learning and patient care enterprises are to improve.

Objectives

To develop a curricular data base containing required competencies and the instruments to rate and evaluate them.

To merge health care institution and community data sets which would enable rapid determination of the status of patient outcomes and areas of strength and weakness.

To enable ongoing monitoring of quality improvement efforts for learners for the curriculum for patients for health care institutions.

To answer, in real-time, questions like:
- “Can this student perform aseptic technique?”
- “Is this resident certified to perform and supervised a PICC Line?”
- “Has this faculty member demonstrated disruptive behavior?”
- “What is the percentage of ampicillin-resistance this month?”
- “Can our students frame a PICO question?”
- What is our CHF readmission rate?

Data in the Palm of Your Hand

- Faculty, Learners, Caregivers, Administrators, and Patients need access to good data to understand “present status” and to accomplish quality improvements.
- A hand-held data base could provide immediate access to learner data, curriculum data, patient data and system data.
- Faculty, Learners, Caregivers, Administrators, and Patients need answers to critical questions quickly and accurately if our teaching, learning and patient care enterprises are to improve.

Tracking Competence and Improving Quality

<table>
<thead>
<tr>
<th>Accessible</th>
<th>Question</th>
<th>Data Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student learner data</td>
<td>Current requirements</td>
<td>Have the learner demonstrated their ability to perform an intervention?</td>
</tr>
<tr>
<td>Student Assessment Forms</td>
<td>Did this learner evaluate and manage a patient with a specific complication?</td>
<td>Patient and Procedure logs</td>
</tr>
<tr>
<td>Patient and Procedure logs</td>
<td>Is this resident certified to perform and supervised a PICC Line?</td>
<td>Simulation center participation and log printouts</td>
</tr>
<tr>
<td>Faculty learner data</td>
<td>Faculty Assessment Forms</td>
<td>How is the attending completed the PICC Line training?</td>
</tr>
<tr>
<td>Professionalism log</td>
<td>Does this physician have a record of disruptive behavior?</td>
<td>Professionalism log entry summaries</td>
</tr>
<tr>
<td>Hospital monitoring program data</td>
<td>Does this physician respond to health care rules?</td>
<td>Hospital quality improvement and quality information</td>
</tr>
<tr>
<td>Patient data (Virtual and Real)</td>
<td>Electronic Medical Record and Registration (Real and Virtual)</td>
<td>Patient data input</td>
</tr>
<tr>
<td>Data Input</td>
<td>Patient data input</td>
<td>Has this patient seen the video on prostate cancer screening?</td>
</tr>
<tr>
<td>System data</td>
<td>Data Input</td>
<td>What are the patient education resources available to this community?</td>
</tr>
</tbody>
</table>

Resources and Faculty Development

- Orientation to Data Base components and reports
- On-line training modules with “Rate Yourself” exercises
- Presentations at faculty meetings, department meetings, Block meetings.
- Data Base consultant HotLine
- Data Base Administrator
- Data Base developer and innovator
- Faculty and Student Guides to Data Base components and uses.

Discussion

Our distributed educational and patient care system requires a modern organizational methodology.

A curricular, assessment, and patient care data base with Smart Phone accessibility could mitigate several challenges of our present educational and patient care system:
Faculty would be able to access curricular requirements and evaluation tools in real time when needed.

Learners would have immediate access to curricular resources and explicit competency requirements and be able to track their accomplishments.

Patient safety could be improved by clarifying provider certification status.

Connectivity between caregivers and patient care data could be improved.

References

- Hodges, BD: A Tea-Steeping or i-Doc Model for Medical Education? Academic Med 2010; 85:S34-44
- Ferenchick, G: Just in Time: Technology to Disseminate Curriculum, TLM Volume 20 Issue 1