Patient Safety Matters

Challenges and Opportunities

How we see and deal with these matters
And why are others interested in our work?
We are about Placing Patient Safety at the heart of Medical Education and Practice
CONTENT OF THIS AND THE OTHER THREE PRESENTATIONS

- Our Mission, Driving principles, Premises, and Implications
- The Burden of Lack of Safety on the Nation
- The Opportunity
- Our approach to lightening the Burden

Main Areas of our Activity
- Education/training
- Safety Practice Enhancement
- Formation of Culture & TRM
Our Innovative Approaches

• Culture of safety
Current Situation
Scherkenbach’s Cycle of Fear, 1991

Fear

Micromanage
(Barking up the wrong tree)

Filter the data
(game the system)

Kill the messenger
(denial; shift the blame)
Current Strategies for identifying safety problems:

Error reports

- Can provide rich information
- Under-reporting is the norm
- Gradual shift towards a culture of safety will help improve rates of reporting
- Promising work is being done in this area
- *Errors reports are a valuable source of info but do not yet provide the whole picture*
Current Strategies for identifying safety problems:

**Practice Profiles**
- Many physicians ignore them
- Disregard uniqueness of individual practices
- A cause of division between ‘winners’ and ‘losers’
- A cause of poor morale

**Audits**
- Useful, objective way of measuring performance
- Most are based on documentation – a limited view
- Tend to focus on a specific area
Need for Change in Strategy
Various (overlapping) Possible Strategies for Improving in Patient Safety are:

- Punitive action directed against individuals

Avoid
Various (overlapping) Possible Strategies for Improving in Patient Safety are:

- Punitive action directed against individuals
- Counseling and retraining Staff/Pt.

Can help considerably
Various (overlapping) Possible Strategies for Improving in Patient Safety are:

- Punitive action directed against individuals ✗
- Counseling and retraining Staff/Pt.
- Process Redesign

Helps even more
Various (overlapping) Possible Strategies for Improving in Patient Safety are:

- Punitive action directed against individuals
- Counseling and retraining Staff/Pt.
- Process Redesign
- Technical and Technological System Enhancement

These lead to significant improvements
Various (overlapping) Possible Strategies for Improving in Patient Safety are:

- Punitive action directed against individuals ✗
- Counseling and retraining Staff/Pt.
- Process Redesign
- Technical and Technological System Enhancement
- Cultural Changes

These are the most effective and sustainable and they augment the above four
**Pathological:** Why Bother about Patient Safety?

**Reactive:** Do something when we have an incident

**Bureaucratic:** ‘We have system in place’

**Proactive:** We are always on the alert/thinking about what might emerge

**Safety-Cultured:** We manage Safety as an integral part of everything we do
Policy for Safety by Leadership

Safety Improvement Empowerment

The Board/Leaders

The CEO

The CFO

The COO

The CNO

Senior Managers

Senior Managers

Senior Managers

Frontline Staff

Frontline Staff

Frontline Staff

Frontline Staff

Frontline Staff

Frontline Staff

Frontline Staff

Frontline Staff

Staff

Staff

McGregor 1960

G and R Singh

McGregor 1960

© Singh 2002/10

Synthesis

Top-Down

Analysis

© Singh 2002/10

Fulfilment
Culture of Safety
Will help
break this Cycle
with
Self-empowered
and
Self-motivated teams

Kill the messengers
(denial; shift the blame)

Micromanage
Park at the wrong tree

Filter the data
(game the system)

Scherkenback’s Cycle of Fear, 1991

© Gurdev Singh 2007
So how do we form the Safety Culture?
Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared Common vision.
Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared common vision.

Make SAFETY Leadership’s Priority and every one’s responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices, and provide resources for analysis and system redesign.
Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared Common vision.

Make SAFETY Leadership’s Priority and every one’s responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices.

Design the System for Recovery, making errors visible and detectable, making it hard to carry out irreversible actions but easy to reverse inadvertent actions, as well as building barriers and redundancies.
Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared Common vision.

Make SAFETY Leadership's Priority and every one's responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices, and provide resources for analysis and system redesign.

Design the System for Recovery, making errors visible and detectable, making it hard to carry out irreversible actions, as well as building barriers and redundancies.

Adopt Proactive Approach by adopting prospective tools of systems analysis (FMEA) and exploiting technology (e.g. EMR with inductive and deductive decision support systems).
Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared Common vision.

Make SAFETY Leadership’s Priority and every one’s responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices, and provide resources for analysis and system redesign.

Design the System for Recovery, making errors visible and detectable, making it hard to carry out irreversible actions but easy to reverse inadvertent actions, as well as building barriers and redundancies.

Adopt Proactive Approach by adopting prospective tools of systems analysis (FMEA) and exploiting technology (e.g., EMR with inductive and deductive decision support systems).

Create Non-hierarchical Teams; built on mutual respect, trust, collaboration, cooperation and clear delegation of responsibility as well as incentive to use initiative for unforeseen situations with minimum stress.
Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared Common vision.

Make SAFETY Leadership’s Priority and every one’s responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices, and provide resources for analysis and system redesign.

Design the System for Recovery, making errors visible and detectable, making it hard to carry out irreversible actions but easy to reverse inadvertent actions, as well as building barriers and redundancies.

Adopt Proactive Approach by adopting prospective tools of systems analysis (FMEA) and exploiting technology (e.g., EMR with inductive and deductive decision support systems).

Facilitate Accurate and Timely Information e.g., exploiting relational databases and decision support systems for safe healthcare with particular attention to care transitions.

Create Non-hierarchical Teams; built on mutual respect, cooperation, and clear delegation of responsibility as well as incentive to use initiative for unforeseen situations with minimum stress.

Advocate Holistic Systems Approach: Addressing fragmentation and decentralization to capture and understand complexity, creating a shared Common vision.
Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared Common vision

Make SAFETY Leadership’s Priority and every one’s responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices, and provide resources for analysis and system redesign

Design the System for Recovery, making errors visible and detectable, making it hard to carry out irreversible actions but easy to reverse inadvertent actions, as well as building barriers and redundancies

Adopt Proactive Approach by adopting prospective tools of systems analysis (FMEA) and exploiting technology (e.g., EMR with inductive and deductive decision support systems)

Create Learning Environment in which error reporting (preferably voluntary) is non-punitive, confidential and accessible to all staff and patients with no restrictions on format

Create Non-hierarchical Teams; built on mutual respect, trust, collaboration, cooperation and clear delegation of responsibility as well as incentive to use initiative for unforeseen situations with minimum stress.

e.g., relational databases and decision support systems for safe healthcare with particular attention to care transitions
Create Awareness of the Value of Quality that leads to patient and staff job satisfaction, that energizes and empowers the workers to improve Quality, leading ultimately to increased profitability (i.e. use Humanistic approach to safety management)

- Create Learning Environment in which error reporting (preferably voluntary) is non-punitive, confidential and accessible to all staff and patients with no restrictions on format.

- Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, creating a shared Common vision.

- Make SAFETY Leadership’s Priority and every one’s responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices, and provide resources for analysis and system redesign.

- Design the System for Recovery, making errors visible and detectable, making it hard to carry out irreversible actions but easy to reverse inadvertent actions, as well as building barriers and redundancies.

- Adopt Proactive Approach by adopting prospective tools of systems analysis (FMEA) and exploiting technology (e.g. EMR with inductive and deductive decision support systems).

- Create Non-hierarchical Teams; built on mutual respect, trust, collaboration, cooperation and clear delegation of responsibility as well as incentive to use initiative for unforeseen situations with minimum stress.

- Facilitate Accurate and Timely Information e.g. exploiting relational databases and decision support systems for safe healthcare with particular attention to care transitions.
Framework of Interactive Contributors to the Construct of Culture of Patient Safety

Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared Common vision.

Make SAFETY Leadership’s Priority and every one’s responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices, and provide resources for analysis and system redesign.

Create Awareness of the Value of Quality that leads to patient and staff job satisfaction, that energizes and empowers the workers to improve quality leading ultimately to increased profitability (i.e. use Humanistic approach to safety management).

Create Learning Environment in which error reporting (preferably voluntary) is non-punitive, confidential and accessible to all staff and patients with no restrictions on format.

Create Non-hierarchical Teams; built on mutual respect, trust, collaboration, cooperation and clear delegation of responsibility as well as incentive to use initiative for unforeseen situations with minimum stress.

Facilitate Accurate and Timely Information e.g. exploiting relational databases and decision support systems for safe healthcare with particular attention to care transitions.

Design the System for Recovery, making errors visible and detectable, making it hard to carry out irreversible actions but easy to reverse inadvertent actions, as well as building barriers and redundancies.

Adopt Proactive Approach by adopting prospective tools of systems analysis (FMEA) and exploiting technology (e.g. EMR with inductive and deductive decision support systems).

Create Awareness of the Value of Quality.
Manifestation of
Safety Climate:
Expressing itself in
Measurable
Attitudes
and
Perceptions

Adopt Systems (Holistic) Approach: Address fragmentation and decentralization to capture and understand complexity of the system, to create a shared Common vision

Make SAFETY Leadership’s Priority and every one’s responsibility. Provide adequate and competent human resources and develop procedures for identifying and dealing with unsafe practices, and provide resources for analysis and system redesign

Design the System for Recovery, making errors visible and detectable, making it hard to carry out irreversible actions but easy to reverse inadvertent actions, as well as building barriers and redundancies

Adopt Proactive Approach by adopting prospective tools of systems analysis (FMEA) and exploiting technology (e.g. EMR with inductive and deductive decision support systems)

Create Non-hierarchical Teams; built on mutual respect, trust, collaboration, cooperation and clear delegation of responsibility as well as incentive to use initiative for unforeseen situations with minimum stress.

Create Awareness of the Value of Quality that leads to patient and staff job satisfaction, that energizes and empowers the workers to improve quality leading ultimately to increased profitability (i.e. use Humanistic approach to safety management)

Create Learning Environment in which error reporting (preferably voluntary) is non-punitive, confidential and accessible to all staff and patients with no restrictions on format

Facilitate Accurate and Timely Information e.g. exploiting relational databases and decision support systems for safe healthcare with particular attention to care transitions

Manifestation of Safety Climate:
Expressing itself in Measurable Attitudes and Perceptions with Numerous Cybernetic loops with the Culture.

Framework of Interactive Contributors to the Construct of Culture of Patient Safety: Manifesting as Safety Climate, which Expresses itself (partly) in Measurable Attitudes and Perceptions with Numerous Cybernetic loops with the Culture.
That is all very well but we have limited $$$$$$
*Resistant Providers*
Not enthusiastic
- Resistance to external data
- Resistance to change
- Culture of blame
- Avoidance of high-risk patients
- Concern with ‘indicators’
- Unintended –ve consequences
- May undermine wholesome/multi-disciplinary approach
- Compromises Clinician-Patient Relation
- May not address co-morbidities

*Empowered Providers*
Form Self-empowered and Motivated Team
- Receptive to external data
- Provides preparedness for P4P
  - It is prospective
- Internal measurements – privacy
- Makes info. useful at the point of care
  - Patient centered
- Forms culture of Safety/Quality
- Cost effective quality improvement
- Can improves patient satisfaction
  - Increase clinician satisfaction
- Provides change management tools
  - May reduce malpractice

---

Top Down

Bottom Up
**Resistant Providers**
Not enthusiastic
- Resistance to external data
- Resistance to change
- Culture of blame
- Avoidance of high-risk patients
- Concern with ‘indicators’
- Unintended –ve consequences
- May undermine wholesome/multi-disciplinary approach
- Compromises Clinician-Patient Relation
- May not address co-morbidities

**Empowered Providers**
Form Self-empowered and Motivated Team
- Receptive to external data
- Provides preparedness for P4P
  - It is prospective
- Internal measurements – privacy
- Makes info. useful at the point of care
  - Patient centered
- Forms culture of Safety/Quality
- Cost effective quality improvement
- Can improves patient satisfaction
  - Increase clinician satisfaction
- Provides change management tools
  - May reduce malpractice

---

**Top Down**

**Bottom Up**
Resistant Providers
Not enthusiastic
• Resistance to external data
• Resistance to change
• Culture of blame
• Avoidance of high-risk patients
• Concern with ‘indicators’
• Unintended –ve consequences
• May undermine wholesome/multi-disciplinary approach
• Compromises Clinician-Patient Relation
• May not address co-morbidities
• …..

Empowered Providers
Form Self-empowered and Motivated Team
• Receptive to external data
• Provides preparedness for P4P
  • It is prospective
• Internal measurements – privacy
• Makes info. useful at the point of care
  • Patient centered
• Forms culture of Safety/Quality
• Cost effective quality improvement
• Can improves patient satisfaction
• Increase clinician satisfaction
• Provides change management tools
• May reduce malpractice
• …..

Large proportion of all the organizations (outside H.Care) that were earlier adopters of P4P have already dropped it!
The four laws of economic incentives

1. Salary
   Do as little as possible for as few people as possible

From Martin Rowland Singh: April 2005
The four laws of economic incentives

Top Down

1. Salary  Do as little as possible for as few people as possible

2. Capitation  Do as little as possible for as many people as possible

From Martin Rowland Singh: April 2005
The four laws of economic incentives

Top Down

1. Salary  
   Do as little as possible for as few people as possible

2. Capitation  
   Do as little as possible for as many people as possible

3. FFS  
   Do as much as possible, whether or not it helps the patient

From Martin Rowland Singh: April 2005
The four laws of economic incentives

1. Salary  Do as little as possible for as few people as possible

2. Capitation  Do as little as possible for as many people as possible

3. FFS  Do as much as possible, whether or not it helps the patient

4. Quality\textsuperscript{p4p}  Carry out a limited range of highly commendable tasks, but nothing else

From Martin Rowland  Singh: April 2005
The four laws of economic incentives

**Top Down**

1. Salary: Do as little as possible for as few people as possible.
2. Capitation: Do as little as possible for as many people as possible.
3. FFS: Do as much as possible, whether or not it helps the patient.
4. Quality p4p: Carry out a limited range of highly commendable tasks, but nothing else.

---

The Transcendent Law of economic incentive:

**Bottom Up**

Create Adaptive Practices with Self-empowered and Self-motivated Teams Embedded in a Culture of Safety.

This approach has received AHRQ support (R21 and R18)

Singh 2005

---

4. Quality

Carry out a limited range of highly commendable tasks, but nothing else.
Let us adopt an eclectic approach
Why not ask them what they see?

ALL workers “Swimming in the Water” can each see various parts at various times

Capture Their Memory

Humanistic = Pursuit of Excellence

REPORTS
PROFILES
AUDITS

Mechanistic

95%

5%

Comp/Supplementary
This is **Team Resource Management**

(=CRM)

This is Prospective
Our Approach

- Treat each ‘practice/setting’ as a unique micro-system to help it thrive; through trust, mutual respect and collaboration between all ‘agents’ ("strange attractors" that produce order in disorder/uncertainty).

- Culture of safety has to be established that encourages empowerment, ownership, and raises morale—shift from blame culture.
Proposed cyclical approach:

1. Assess/Measure
   Baseline
   Safety state

2. Identify
   Most significant
   System Problems

3. Establish team based feasible
   solutions to prioritized hazards

4. Implement team based solutions

Overall view of methodology for safety improvement (based on FMEA)
Based on understanding of:

PATIENT
Beliefs
Preferences
Family, Friends
Community

1: Office

Macro-System of Primary Care
Office Domain
and understanding of:
**Macro-System**

**SEMI-P Instrument**
## Anonymous Error Survey Example page

### Provider Decision-Making: Problems in communication with patient/caregiver

<table>
<thead>
<tr>
<th>Missing/inaccurate info from patient/caregiver</th>
<th>How often does this happen?</th>
<th>What is the usual consequence?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergies</td>
<td>Frequent</td>
<td>Severe</td>
</tr>
<tr>
<td>Prescription Medications taken</td>
<td>Occasional</td>
<td>None</td>
</tr>
<tr>
<td>Over the counter medications/supplements taken</td>
<td>Rare</td>
<td>Minimal</td>
</tr>
<tr>
<td>Medications prescribed by other providers</td>
<td>Uncommon</td>
<td>None</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>Rare</td>
<td>Minimal</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>Uncommon</td>
<td>None</td>
</tr>
<tr>
<td>Past medical history</td>
<td>rare</td>
<td>Minimal</td>
</tr>
</tbody>
</table>

For patients recently discharged from hospital/SNF:

- Patient does not bring updated med list

Other problems in communication:

- Provider in a hurry
- Patient/caregiver in a hurry
- Misunderstanding due to language / accent
- Misunderstanding due to argon used by provider
- Misunderstanding due to patient's poor hearing
- Provider does not involve patient/caregiver in decisions
- Patient/caregiver does not participate in decisions

**OTHER**

<table>
<thead>
<tr>
<th>One or more times in a month</th>
<th>One or more times in a year</th>
<th>Less than once a year</th>
<th>Severity of inpatient complications requiring hospitalization</th>
<th>Impact on hospitalization and discharge planning</th>
<th>Change in symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Supported by the US AHRQ

Overall view of Methodology for Safety Enhancement

1. Assess/Measure Baseline Safety state
2. Identify Most significant System Problems
3. Establish team based feasible solutions to prioritized hazards
4. Implement team based solutions

Prioritization

Prioritization is Based on HAZARD RATING

Hazard = Probability x Severity

The survey yields qualitative perceptions of probability and severity – these must be converted to quantitative values. PROBABILITY (P): its numerical value was derived from the descriptive perception by taking into account the number of patients seen in the corresponding descriptive period. SEVERITY (S): its numerical value was obtained by adopting a risk aversive attitude.

Results

All the compiled results and analysis from the first step were circulated to all the staff. Sample:

<table>
<thead>
<tr>
<th>Area</th>
<th>Most significant System Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Patients delays seeking medical attention / masks by inappropriate self-treatment.</td>
</tr>
<tr>
<td></td>
<td>Two solutions were devised. Firstly, the Providers agreed to focus on the problem of patients (that might represent an acute cardiac event) and Neurological System Problems. Secondly, the providers agreed to always give orders in a written form so as to avoid errors.</td>
</tr>
</tbody>
</table>

Informed by important safety principles, strategies and equipment features
Supported by the US AHRQ

Enabled by HIT

Informed by important safety principles, strategies and equipment features
Our past experiences with this methodology

• FM Practices
• Post-operative pain management
• Falls management
• SNF
Our experience with this approach:

• **Filling out the survey:**
  – Helps make everyone more aware / conscious of problems
  – Helps make people more safety conscious

• **Seeing the results:**
  – Helps people to see other peoples’ perspectives
  – Helps in identifying priorities for improvement
Advantages of this Humanistic Approach:

- Creates awareness among the staff of the **value of quality**
- Leads to improvement in patient and staff **satisfaction**
- Energizes the empowered workers to maintain and continually **improve quality**
- Has potential to reduce **litigation**
- Can lead ultimately to **increased profitability.**

**Findings of Strategic Planning Institute**

“**Relative perceived service quality**”
What does our approach Spell?
What does our approach Spell?

TEAMWORK

Transdisciplinary

FORTUNE June, 2006
Likely to provide the biggest FOR

About 2 trillion
Our Aspiration

Transfer approach across all the domains