A ROADMAP & DEVELOPMENT STRATEGY FOR PUBLICLY REPORTED HEALTH OUTCOMES & PATIENT SAFETY

DISCUSSION DRAFT

Since we published Publicly Reported Health Outcomes (PRHOs): A National Initiative To Improve Care in July of 2022, the concept has been incorporated into the Better Care Plan (BCP) white paper published last July (2023) and we have explored various development strategies. The purpose of this article is to update the original proposal, define the necessary building blocks to develop and implement the PRHO/patient safety initiative, and articulate a development strategy that is cognizant of the potential obstacles to successful implementation.

SUMMARY OF PROPOSAL

The original proposal was to gather, in real time, risk-adjusted, patient anonymized health outcomes that could be aggregated by health provider organization (“**HPO”**) and health plan to compare with their peers based on objective measures of quality. Reports based on that data would be made available to purchasers, consumers and the general public to enable them to choose better quality, safer care and coverage. This initiative has three objectives:

1. To enable HPOs to better manage and continuously improve their risk-adjusted outcomes performance.
2. To enable health plans and other purchasers of care to continuously improve the quality of their provider networks.
3. To enable health care consumers to choose their providers based on objective measures of quality.

In addition, the Better Care Plan white paper proposes the establishment of a **National Patient Safety Board**, which would use the same data to detect medical errors and propose corrective action.

Rationale

Motivation for this initiative derives from multiple research findings, including:

- A BCG study of mortality rates among US hospitals summarized by the NY Times headline: “Go to the Wrong Hospital and You’re Three Times as Likely to Die.”
- A study by Yale Professor Jason Abaluck, which concluded that health plan mortality rates vary by a factor of 4 to 1.
- A report from the Commonwealth Fund showing the US has higher rates of mortality, excess mortality, prevalence of diagnostic errors, etc. than ten other countries.[i]
- AHRQ reports more than 7 million incorrect diagnoses in ERs every year.

From this body of work, we conclude that: (a) there is substantial potential to improve the safety, outcomes and diagnostic accuracy of patient care and (b) real-time reporting of outcomes for most, if not all, payers and providers is feasible, although continued development of information technology is needed, as discussed below.

What to Measure

The seminal idea behind PRHOs was to measure actual outcomes rather than processes or subjective measures, e.g. patient satisfaction. The core outcome is life or death, i.e. mortality.

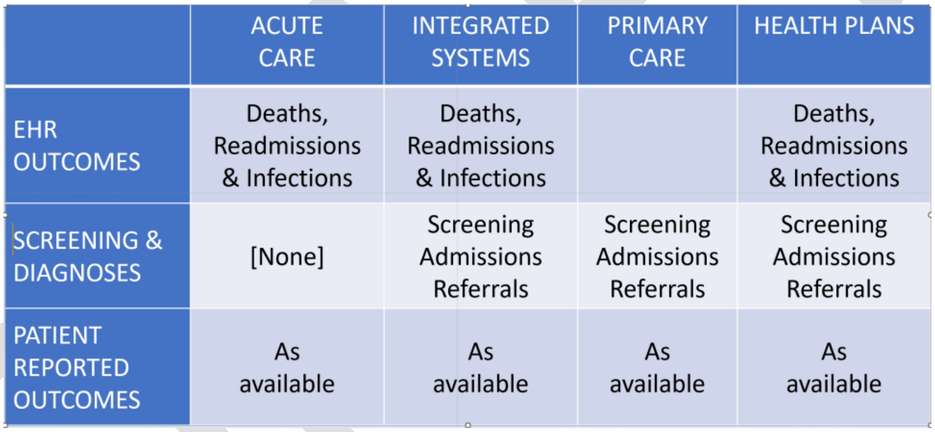
CMS has gone to great lengths to catalog and measure mortality, but only in acute care settings for Medicare fee-for-service beneficiaries, a shrinking population that now accounts for less than half of Medicare enrollees. CMS also includes readmissions to acute care facilities within 30 days of discharge, a measure of morbidity, albeit limited in scope.

PBGH's California Quality Collaborative (CQC) in California, for example, has "defined a measure set focused on patient health outcomes" for its Advanced Primary Care program. So, while the CMS database represents the tip of the spear, to really address patient safety, outcomes measurement needs to be expanded in multiple dimensions:

1. **Outcomes for all populations**, not just Medicare FFS enrollees.
2. **Mortality and morbidity** in all provider settings, not just acute care hospitals.
3. **Patient Reported Outcome Measures (PROMs)** addressing pain and ability to function normally. CMS recommends considering PROMIS, HOS and FOTO.
4. **Primary care:** diagnostic accuracy and specific process measures for important causes of mortality and morbidity, such as cancer, hypertension and diabetes. One example is PBGH's Advanced Primary Care Measure Set

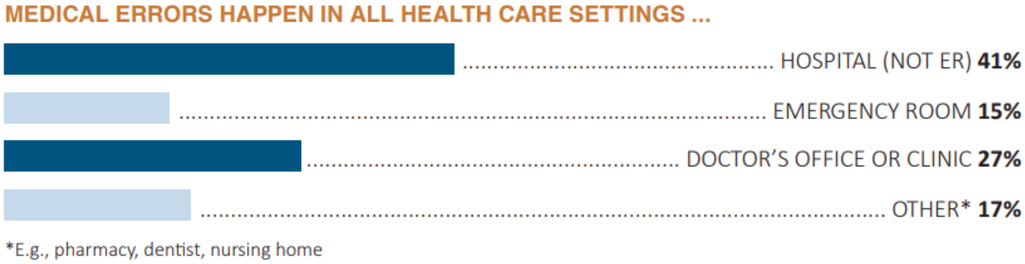
Patient Reported Outcomes Measures (PROMs) can be limited by low response rates with large variations depending upon ethnicity.[ii] However, in other providers, e.g. University of Texas at Austin, have reported "*nearing 100% compliance with patient completion of the necessary electronic questionnaires-- PROMIS Global-10 and the PHQ-9 surveys—by the time of the initial consultation with the physician.*"[iii]

We continue to recommend that a panel of clinicians, purchasers and consumer representatives, advised as needed by medical data scientists and other professionals, be convened to develop an initial list of outcomes to be measured, which should begin simply and can be expanded over time.



	ACUTE CARE	INTEGRATED SYSTEMS	PRIMARY CARE	HEALTH PLANS
EHR OUTCOMES	Deaths, Readmissions & Infections	Deaths, Readmissions & Infections		Deaths, Readmissions & Infections
SCREENING & DIAGNOSES	[None]	Screening Admissions Referrals	Screening Admissions Referrals	Screening Admissions Referrals
PATIENT REPORTED OUTCOMES	As available	As available	As available	As available

Patient Safety



The National Patient Safety Board Advocacy Coalition contends that "*2018 Medicare data indicates 25% of patients experienced harm in hospitals, and … there was an even further "substantial deterioration" in patient safety measures during COVID-19.*" A two page monograph defines a Patient Safety Event as:

- an action or inaction that led to patient injury or harm in a healthcare setting,
- an action or inaction that could lead to patient injury or harm, or
- a near-miss that could have harmed the patient.

The Better Healthcare Policy Group has endorsed House Bill H.R. 9377 creating a National Patient Safety Board to oversee an entity "*that houses a national repository of the best patient safety practices*". Meanwhile, excellent work is being done at the state level in Massachusetts, for example, at the Betsy Lehman Center for Patient Safety.

BUILDING BLOCKS

In order to realize the potential of PRHOs, certain building blocks will be required. We previously recommended convening a "*multistakeholder group of health care purchasers and consumers advised by health professionals with expertise in quality measurement*" to decide what to measure and how to measure it. In addition, these are some of the critical building blocks:

1. **A coalition of employers, health-centric business groups and Taft-Hartley organizations** committed to outcomes transparency are a key factor in the development of PRHOs. Commitments from these organizations will be needed: (a) to serve as an initial user group; (b) to provide direction and startup funding for the development effort; and (c) provide outreach to their members,
2. **Participating Provider Organizations:** Top performing HPOs will need to be persuaded to disclose their (superior) outcomes. They could become development partners to begin a movement toward outcomes transparency. If successful, this effort would motivate additional HPOs to join creating Better Business Bureau for healthcare providers.
3. **An Advisory Board** of health care purchasers, consumers and clinicians to determine what specifically to measure. This advisory group will need to make and understand the tradeoffs needed to get an initial "product" off the ground while retaining a vision of the long-term potential of a mature reporting system.
4. **Funding.** Development of a comprehensive database and data exchange will require financing. Sources of funding to develop the database could include employer coalitions, existing NGOs, health plans, providers and private investors, as well as foundations and government, and will depend on the form of organization, e.g. NGO or shareholder owned.
5. **A Comprehensive Health Outcomes Database** using claims or EHRs as a source, which could be refined and expanded over time to include virtually all providers, continue refinement of outcomes measures as recommended by the advisory group and could be developed initially at a state level or demonstration project with a limited number of providers.
6. **A Health Outcomes & Patient Safety Data Exchange** to assume responsibility for the collection, processing and dissemination of data. While an existing NGO could conceivably do this, starting with a clean slate would ensure that outcomes receive the highest priority.
7. **Better Care Certification** of providers could complement the PRHO initiative by ensuring that essential primary care processes such as screening for diabetes result in better outcomes, and reliance on outcomes could simplify the certification process.

POTENTIAL OBSTACLES

It is important to be cognizant of the many ways that this effort could be derailed and to address them early on. Some of potential obstacles could include:

Inadequate Stakeholder Participation & Involvement

1. Insufficient HPOs (or payers) willing to participate.
2. Inability to assemble a broad employer coalition.
3. Failure of EHR vendors to comply with federally mandated eCQM requirements.
4. Excessive administrative burden, i.e. insufficient automation, on providers.
5. Insufficient adoption by employers and employer-sponsored plans.

Development Effort

1. Too many interested parties involved in the design and development process.
2. Excessive reliance on government regulation or on private sector initiatives.
3. Bogged down by politics and competing interests.
4. Insufficient funding and/or staffing, cost overruns, delays, etc.

Design/Methodology

1. Inability to agree upon a limited number of outcomes to be measured.
2. Flawed risk adjustment methodology that defeats comparability of HPOs.
3. Too much extraneous information, e.g. process information or patient ratings.
4. Over-reliance on legacy approaches.

Usability & Market Considerations

1. Overly complex reports for consumers and employee benefits administrators.
2. Overly simplistic reports that fail to adequately differentiate among providers, e.g. Medicare.gov.
3. Failure to educate consumers or make quality information available to consumers where and when actually needed.
4. Insufficient market competition due to consolidation & other factors

DEVELOPMENT STRATEGY

The development strategy described below is intended, among other things, to address the Potential Obstacles described above.

Stakeholder Participation

We believe that private sector participation is essential because: (a) employers have the most to gain from improved quality of care; (b) they are least encumbered by the legislative gridlock in Washington; (c) past successes of NGOs, such as NCQA and LeapFrog (Hospital Safety Grades), offer proof of concept; and (d) recent advances in database availability and usage have come from shareholder owned companies like Epic, HealthVerity and Embold Health. Our suggested strategy to turn these potential obstacles into opportunities is as follows:

Through collaboration of employers and other payers, we believe the promise of publicly reported health outcomes & patient safety can be realized for selected providers with a minimum of legislative and regulatory mandates. Employer sponsored health insurance (**ESI**) covers approximately half of the insured population in the United States. Unlike government payers, employers can save money by improving employee wellness and thereby improving productivity and reducing employee absenteeism and turnover.

We expect that payers and providers will resist disclosure of their mortality rates initially just as acute care facilities responded to disclosing the information on which Hospital Safety Grades are based. One strategy is to start by persuading the highest performing providers, as measured by risk-adjusted outcomes, to disclose their superior results similar to a Centers of Excellence approach. Additional complementary initiatives include: (1) a coalition of employers to insist on disclosure much as they did with hospitals reporting using the Leapfrog Group in the 1990s; and (2) state and/or federal outcomes reporting and disclosure mandates.

So, it will be essential to assemble a large and cohesive alliance of employers and other payers, without which there would be insufficient motivation and resources for the stakeholders to navigate the remaining obstacles. That coalition will need to obtain commitments from at least a significant number of HPOs. And the sponsors must be willing and able to commit sufficient financial, human and technical resources to design and develop and deploy a database and reporting system that meets the needs of payers, patients and providers.

Outcomes Database

PRHO and Patient Safety cannot exist without a reliable, accessible database that reliably tracks enrollees'/patients' health status through the healthcare system. Two sources of data currently exist – electronic health records (EHRs) and health insurance claims. Although a comprehensive EHR database is the preferred option, an all-payer database may be serviceable in the immediate future with no additional administrative burden.

All-Payer Database Available Now

Currently, the most widely used outcomes database is derived only from acute care hospitals and is limited to Medicare fee-for-service enrollees, a shrinking population due to the growing popularity of Medicare Advantage plans. The CMS database is typically 18 to 24 months old before it is released to users. What is needed is a more comprehensive and up-to-date national database that includes "medical claims, pharmacy claims, dental claims, and eligibility and provider files collected from private and public payers"[iv].

PRHOs could be derived from an "all-payer" claims database although measurable outcomes may be limited. HealthVerity offers a multi-payer database, with 330 million patients, and is used by life sciences companies, as well as government and insurers. Embold Health uses HealthVerity data to report on and compare individual "physician performance ratings".

Numerous Advantages of EHR Database when Available

We believe, however, that a better long-term approach is to use a comprehensive database derived from electronic health records (EHRs). Among the advantages to an EHR database:

1. It can be harvested sooner than a claims database.
2. It is more granular and should therefore be easier to access the outcomes we want to measure.
3. Because it is extracted directly from EHRs it minimizes the administrative burden.
4. With interoperability being mandated we are moving in the direction of a comprehensive clinical database for all providers and provider settings.
5. It may be the only usable source of patient safety data.

And an EHR database lends itself to medical management and oversight as everyone from clinician to consumer is working with the same data, albeit at progressive levels of summarization. Elevance Health is working with Epic to "break down data silos and integrate data on patients' physical, mental and social health into a longitudinal patient record within electronic health record (EHR) systems" according to Elevance CEO Gail Boudreaux. The Cosmos database is an aggregation of Epic's clients' electronic health records data for over 1,300 hospitals and 203 million patients. Cosmos has proven useful in evaluating various Covid treatment protocols in nearly real time. While Cosmos is an extremely useful database, it would need to be combined with other EHR vendors' databases to be as comprehensive as "all-payer" claims databases.

EHR Interoperability Evolving

The oft-cited siloing of data by multiple competing EHR vendors has been a barrier in the past, but progress toward interoperability is being made, as cited above (Epic and Elevance). And CMS has initiated an effort to "*streamline quality measures across CMS quality programs for the adult and pediatric populations",* which they are calling the Universal Foundation, and CMS's eCQM initiative is designed to address data siloing.

EHR Database: Antidote to Reporting Fatigue

Some have cited "reporting fatigue" as a potential barrier. But an outcomes database relies primarily on automated collection and analysis of anonymized data already contained in patient records, thus imposing little or no additional burden on providers other than assuring the accuracy and currency of their clinical data with a likely assist from AI.

Organization of Development Team

It is impossible to stress how important it will be to employ a highly qualified, skilled and motivated **advisory board and steering committees** that are not wedded to the current solutions. It may be helpful to think of this design and development effort will need to resemble a moonshot that will require talent, motivation, teamwork, sufficient resources and clarity of vision.

While funding and resource allocation must be addressed by the sponsors and stakeholders, the focus of development effort will be determined by the composition of an advisory board and steering committees. While the advisory board should appropriately be populated by senior professionals, it may make sense to create the following steering committees, each representing a stakeholder group:

1. **Employers**, who can redesign their benefit plans to assist and motivate employees and their families to make maximal use of PRHOs and employees/consumers who would use them.
2. **Provider Organizations** that can benefit from real time continuous feedback on outcomes.
3. **Medical professionals** who can best visualize a functioning national patient safety organization.

We recommend that these steering committees be staffed by the next generation of stakeholders, who have a vested interest in the long-term success of the effort(s) and are less inclined to repurpose legacy applications and approaches.

Private & Public Sector Cooperation

Private sector participation is essential because: (a) they have the most to gain from its implementation, i.e. reduced employee absenteeism, turnover and loss of productivity; (b) they are minimally encumbered by legislative dysfunction in Washington; (c) past private sector successes with NGOs, such as NCQA and LeapFrog (Hospital Safety Grades), suggest the way forward; and (d) recent advances in database availability and usage have come from shareholder owned companies like Epic, HealthVerity and Embold Health.

While we have emphasized the importance of private sector participation, there is also a role for the public sector. We have already cited the role of CMS in promoting interoperability. Various states have created or at least mandated all-payer claims databases, and states like California, Minnesota and Massachusetts have shown leadership in measuring the quality of medical groups. The development of an EHR database will be costly, which argues for a nationwide alliance of public and private sector entities. PRHOs can be implemented at the state or community level but patient safety is, by definition, a national effort. We think it is important, therefore, to strike a balance between federal, state and private sector participation in a PRHO and Patient Safety development effort in order to give this effort the greatest chance of success.

REFERENCES

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