

Health Outcome Models

Opencity Inc
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Executive Summary

McKinsey & Company estimated a market potential of US\$44 billion in beyond-the-product solutions for medical technology companies in the US alone.





“Providers nationwide have been struggling”

AHRQ

The Economist World in 2016 cites that “Governments will bully treatment providers into cutting costs and showing value”. They recommend to watch “Efforts to hold down government costs are kicking in, in the form of bundled payments to hospitals, that will vary depending on the quality and cost of care”.

This follows a predicted trend and reinforces the points made by Porter, Kaplan and others through Harvard Business Review articles leading discussion of Value in Health Care as well as also the Quality Improvement Hub. Here we explore how multi-national Medtech companies can develop health outcome models.

The Agency for Health Research & Quality is active in developing programs to address some of these citing that “Providers nationwide have been struggling”. This supports our research that with implementation of other cultural change programs supports that customers need some external mentoring to achieve the financial and improved quality of care potential benefits.

Our research suggests that healthcare outcome measurement models can be applied to almost any preventable Healthcare Acquired Condition (HAC) and other areas of care. Essentially, the premise is that the cost of the intervention is substantially less than the financial burden arising from the preventable HAC. Other industry experts indicate new controls around a cultural of safety, starting in the US in 2016.

Few will challenge the statements above, nevertheless, the Medtech industry appears sluggish to actively go-after this beyond-the-product segment in a systematic and strategic way. As always there are some early adopters and innovators who reap the return through deeper broader relationships with more senior decision makers.

Sustainable cultural change:

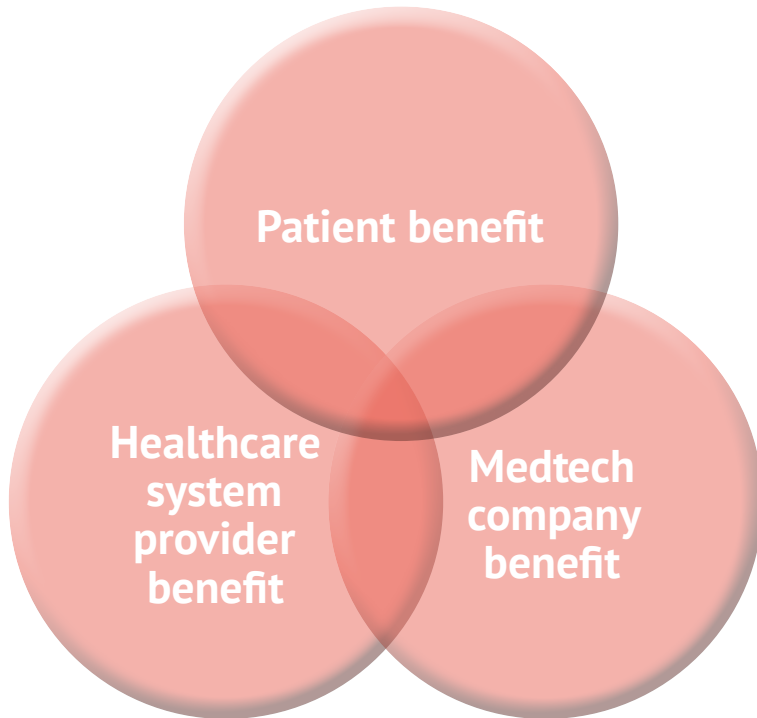
The concept is the delivery of simple, affordable yet very effective interventions, which target a measurable improvement in the delivery of preventative measures. By improving the quality of care delivered, healthcare providers can reduce expenditure associated with treating HACs plus costs of potential litigation.

To achieve success, health outcome programs must be driven by the healthcare provider executive leadership team. The implementation and on-going success will require strong, cross-departmental networking and direct leadership from senior management to support the sustained cultural change within the organisation.

The success of this program depends, to a large extent, on executive level financial and senior leadership commitment from the customer healthcare provider and their team. Such programs have a risk of failure when senior executives are not involved, when they are not convinced of the potential value or when the executive sponsor or champion leaves. This is essentially a long-term organisational program and needs to endure beyond individual personnel changes.

Stakeholder benefits:

We believe models can be defined that benefit the patient, healthcare system provider and Medtech company.



Our experience has also been that building a hypothetical case study allows many internal Medtech company stakeholders to envision the potential value of beyond-the-product solution models.

Components of model development:

An essential starting point is defining the core program components which are critical to ensuring successful and sustainable outcomes. The components outlined here are widely universal and can be further expanded to specific healthcare acquired conditions.

The components need then to be evolved into phases of implementation. The exact order of different phases of the implementation plan depend on many factors and can be ordered to reflect the nature of the program, baseline assessment and healthcare system.

Patient benefits:

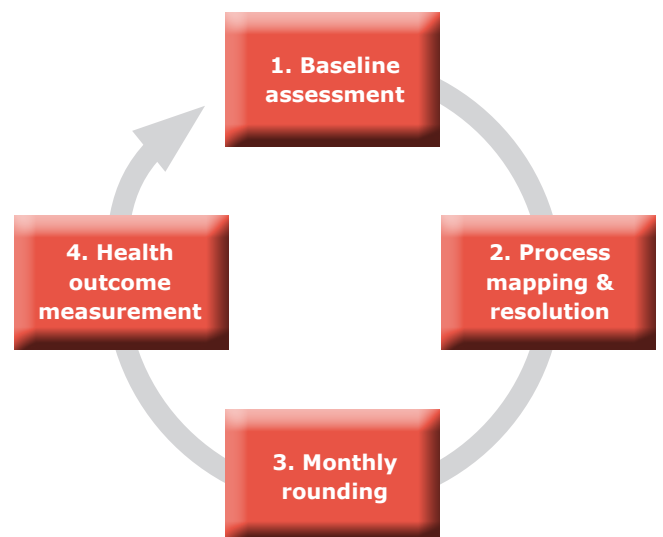
- Improved patient well-being through reduced risk
- Reduced risk of increased length of stay

Healthcare system provider benefits:

- Facilities are mentored in a sustainability initiative
- Improved patient and employee satisfaction
- Reduced risk profile or preventable HAC, and related costs associated with them

Medtech company benefits:

- A customer acquisition or business retention strategy
- A key account approach to move discussion away from price per unit of product to the value of measurable health outcomes
- Facilitate discussions with customer executive decision-makers



Component 1: Baseline assessment

The business case to the healthcare system provider clearly presents what the HAC is costing and helps motivate strategic prioritisation to address it through a health outcome program, mentored by the Medtech company.

An in-depth baseline assessment enables the level of improvement needed and targets will be agreed with the healthcare system customer. The baseline assessment should include health outcome measures as well as leading quality healthcare indicators.

The baseline assessment is fundamental to the development of the initial financial business case presented to the customer and is expected to be prior to a formal partnership being signed with the customer.

Component 2: Process mapping and resolution

Process mapping & resolution is a key component in driving change. The process mapping phase entails a full day interview with the senior executive sponsor, program champion and members of staff during a series of structured questions. The process mapping helps identify root causes where lack of processes or non-adherence results in a failure in the system.



The customer is coached by the Medtech company to address the gaps with new processes that they develop themselves and then roll-out. A strategic change initiative is anticipated to involve a multi-disciplinary team across the healthcare system

Component 3: Monthly rounding

This component drives the successful cultural change and sustainability of the program. The Medtech company mentors the senior executive sponsor, program champion and team through a process of monthly roundings and quarterly review meeting.

This is the key component to the success of the program and has been shown to drive the effectiveness of the whole model. Units are sampled on a monthly basis and the immediate debrief meeting with the executive and program champion drive the corrective action plans. It is for the healthcare system provider to act upon the roundings with those units that are the performance outliers.

Component 4: Health outcome measurement

Clear goals must be set and agreed before the program ever commences.

Outcome measurement underpins the goals of the program. As such, data integrity is paramount. Meaningful health outcome measure end-points and health indicator process measures need to be clearly determined that are signed off by the program executive sponsor.

To ensure that the program executive sponsor and senior leadership team are very clear on the improvements made through the health outcome model an annual report should be prepared and formally presented by the Medtech company.

Product

It can be argued that product could be considered an additional component to the program. The health outcome model contract should be separate from any product tender. It is also appreciated that the phasing of product contracts likely does not synchronise. Add to this, that many contracts across many jurisdictions are now governed by Group Purchasing Organisations and it is difficult to make product a contractual component of a health outcome mentoring program model.

It is expected that in all cases the targeted healthcare system provider is a current customer of the Medtech company providing the cultural change consulting program.

Healthcare outcome measures:

Current research indicates that a combination of leading health indicator process outcomes measures and lagging health outcome endpoints is necessary.

A balance of interim health indicator process metrics (leading) and true health outcome measures (lagging) needs to be mapped out. The concept of leading vs. lagging is well recognised in the field of quality measurement is becoming more embedded in many healthcare initiatives.

We believe the leading healthcare indicator process metrics are critical to outcome and advise that education and interventions are targeted towards these criteria and measured quarterly.

Lagging indicators:

Traditional counting of the number of healthcare associated condition incidents. While they are the ultimate patient centric measure of impact that are slower to change.

Leading indicators:

Preventative care intervention indicators. These health indicators can be predictive of the lagging health outcomes. Adjusting these inputs and provide a faster response in the desired patient centred health outcome.

Process indicators:

Porter argues that many healthcare metrics are in fact measures of process efficiency and not actually outcomes. Nevertheless, they provide early warning signs of potential risk or break-downs in processes that may lead to deterioration in patient outcomes.

Outcome measures:

Stowell and Akerman in addition to Kaplan & Porter argue that the only true measure of healthcare is through measuring value. This requires looking at patient related health outcomes and its relation to cost. The full time-driven activity based costing of a treatment intervention is complex to accurately measure and needs to examine patients over an extended period of time. In recent work published in HBR, Kaplan *et al.* cites radar charts looking at outcome metrics and reciprocal of cost.

“The concept of leading vs. lagging is well recognised”

Critical success factors:

Work over a five-year period, in different therapy areas and with different Medtech companies has boiled down the successful execution of these business models to just a handful of critical success factors.

- The strategic initiative must be owned by the executive leadership of the healthcare system customer
- The customer executive leadership recognise that their current approach requires revision in order to improve outcomes and willing to change
- The role of the Medtech company is to mentor the customer through the process
- Health indicator process metrics and health outcome measurement data integrity is paramount
- A longer term horizon of cultural change is essential to build sustainability
- The Medtech company must carefully segment to select the right customers based on analysis

“The role of the Medtech Company is to mentor the customer”

Where to start building health outcome models:

1. Start with a strategic project charter, with an internal Medtech executive sponsor and defining the vision, accountable project lead and intended project team;
2. Establish an internal project council;
3. Establish a customer advisory panel to guide the customer centricity as well as develop advocates and communications output;
4. Build a brand and so manage as an innovation project in the same way you would a product launch;
5. Articulate a go-to-market commercialisation process playbook;
6. Test all component ideas thoroughly with loyal customers – start small in an isolated market and build;
7. Draft a full suite of anticipated support materials, tools and documents;
8. Take the plunge to build some cases studies – worst case scenario is that you learn an incredible amount in the process through high level discussion with senior decision-makers.

Conclusions:

McKinsey & Company report \$44 billion in beyond-the-product solutions in the US alone. Much of the future potential success for Medtech companies lies in creating health outcome models that sustain cultural change owned by the healthcare system.

Our research indicates that these are financial business models, more than they are clinical programs. While the health outcome measures are clinical, the decision-making on the investment (time and money) is based upon the expected return on investment. Despite a series of interventions many healthcare systems persist with elevated levels of many preventable HACs. These represent unnecessary pain on patients and/or caregivers with the associated financial burden.

Implementing beyond-the-product solutions can drive benefits for the patient, healthcare system provider and the Medtech company. Studies in several therapy areas demonstrate that the decreased costs of treating these preventable healthcare acquired conditions provides excellent return on investment beyond the costs of the interventions.

Many healthcare system providers have tried multiple initiatives over many years to reduce HACs. In many cases the results have not met the desired sustained outcomes. Previous experience with implementation of other cultural change programs supports that customers need some external mentoring to achieve the financial and improved quality of care potential benefits. The results from Medtech companies show that providing targeted consultancy can achieve sustained and dramatic improvement in leading quality health indicators and measurable clinical outcomes.

The seeming simplicity of this white paper does not underestimate the work involved in gaining internal Med Tech executive strategic investment approval, identifying the viable health outcomes measures and measurement data integrity. There are many other additional elements to consider including: human resource staffing capability and competency implications; health outcome data management and integrity; cost of the program to the healthcare system provider.

We argue that the worst case scenario is that you learn an incredible amount in the process of developing these health outcome models with high level insights from executive health system decision-makers. Given that this worse case scenario is not that unattractive can you afford to wait any longer before taking the plunge with beyond-the-product solutions?

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Opencity Inc. mentor Medtech businesses on strategic planning and communications while mutually supporting non-profits through social responsibility...with conscience.

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