Innovation Change Approach (INCA)

This paper is based on original design and proof-of-concept work innovated by:

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The Technology Enabled Process Implementation Modeling white papers are designed to further Health IT & Innovations for the purpose of improving the quality and value of health care in America and around the world. The ideas in these white papers represent innovative collaboration with professionals and academics from diverse fields around the world.

Executive Summary

Traditional information technology training principles have been used effectively in healthcare for many years. However, new approaches in process improvement have proven to be more effective and have been applied successfully in improving healthcare access, care coordination and the delivery of high quality care. Drawing from design thinking, lean six sigma and agile methodologies, this new approach called Innovation Change Approach or INCA, was successfully used to deploy a new telehealth technology platform system for the Los Angeles County Department of Health Services.

Technology enabled process implementation thinking begins with reversing the view of technology implementation activity with the perspective of innovation process as desired outcome. Innovation processes designed to disrupt existing flow of work can be enabled by technology; however, user adoption and integration of new workflow ultimately ensures successful implementation of the innovation process itself.

In order for innovation processes to take root, leaders must first work to establish organizational culture that is receptive to innovation change thinking. The commitment to this approach must start at the very top of the organization, and all staff should be bought into the redesign of workflow to improve process and achieve desired process results.

While healthcare is different in many ways from other professions and businesses, there are also surprising similarities; whether filling orders for online customers or coordinating healthcare for patients, staff must rely on multiple, complex processes to accomplish their tasks and deliver efficiency, satisfaction and value. Delays, errors, waste, or omissions decrease quality as well as value.

The example detailed in this paper of technology enabled process implementation is the "**Innovation Change Approach**", or **INCA™** which represents a new paradigm intended to magnify outcomes for adoption, utilization, productivity, management of cost, quality and timely delivery of work products and services.

Introduction

Technology implementation in healthcare is commonly associated with both administrative as well as clinical scenarios involving adoption of systems or applications to facilitate any number of operational improvements. The implementation involves formation of teams that direct project activity focused on facilitating a level of user proficiency using the technology. In some cases, measurement and/or monitoring of user proficiency is implemented to support ongoing utilization.

Trainers typically conduct end user education and demonstrations focused on how to use features of the technology solution and how to manage discrepancies that may occur. Policies are generally reviewed with end users and, once a technology tool has been initially introduced, demonstrated, and transitioned to active access by users, the initial training phase of implementation is considered to be complete.

This traditional approach to implementing technology alone does not encompass the achievement of desired outcomes for innovating new process. For organizations to realize the value of new processes, there must be an integral application of related change involving workflow and behavior, as well as expectation & reward.

Innovation change is much more a shift of approach to work outcomes than modification of existing workflow. When workers simply modify what they are already doing by learning to substitute one process for another, there is an inherent limitation to realizing the value of innovation change. The value is created when new process is implemented as an outcome of embracing the benefits of innovation change. Technology is simply a tool to facilitate the new process.

Applying Technology Enabled Process Implementation in Healthcare

Implementation of new process in healthcare can provide organizations with means to drive critically important outcomes. From utilization management, to quality improvement, to development and maximization of capacity and beyond, new processes enable workgroups to increase and improve the quality of what they produce. New processes can either be essentially similar to existing process, or they can be innovative and designed as disruptive to those that exist currently.

Technology supplies the physical means to affect the manner by which the new process is implemented. When broken down to individual elements, most processes could (in fact) be accomplished without the aid of technology. This serves to illustrate that it is not technology, in and of itself, that drives the implementation of new process.

When process is redesigned to reflect fundamental change in the outcome of work product, the application of technology serves to enable that desired change. Users of technology who are empowered to understand the desired outcome change are best positioned to innovate, implement and maximize benefits of technology. As an example, users who are able to identify how a system will work to produce improved healthcare service will be best prepared to embrace and fully implement the features of enabled technology.

Because human beings are the users and beneficiaries of healthcare process change, many of the workflow touch points involved in process implementation involve communication, exchange of thoughts, ideas, and observations as well as the exchange of information. These workflow touch points need to be considered "dependencies" in the course of successfully implementing technology to enable processes. Effective touch points that occur during a process will result in both satisfaction as well as achievement of the process improvement outcome. Ineffective touch points that occur during a process result in breakdown and risk for

achieving desired outcomes. Implementing process change that is enabled by technology requires the technology be used in a manner that is highly sensitive to supporting effective touch points.

Delivery of technology enabled process implementation requires an approach that ensures both the appropriate definition of process implementation success as well as produces the desired process outcomes. Caution should be taken to avoid technology enabled process implementation that is focused on the technology itself. Through careful design and execution of a model that emphasizes achievement of desired outcomes, organizations can create the greatest possible value for implementing new process.

The Power of the Innovation Change Approach (INCA™)

Meaningful change in healthcare has surfaced as one of our most significant national challenges. Innovation and technology represent extremely powerful means for healthcare to accomplish the exponential shifts required.

In the past, technology itself has been viewed as a change mechanism when, in fact, it is the design of innovation process and desired outcomes that actually hold real power.

The INCA™ approach seeks to redefine what has (previously) been viewed as change driven through <u>technology implementation activity</u>, to a model that focuses on the <u>innovation process and it's desired outcomes</u>.

Employing a moniker based on 13th century Incan civilization formerly located in modern day Peru that, notably, built over 14,000 miles of road in less than one hundred years (many of which are still in use today) - the Innovation Change Approach INCA™ model seeks to break ground and amplify the impact of technology enabled process implementation.

INCA™ Key Concepts

The INCA™ approach is based on four primary precepts, emulating what the Inca referred to as *Tawantinsuyu* which can be translated as "The Four Regions" or "Four United Provinces", and include:

Benefits: It is well established that resistance to change is a universal reaction, and that most people reject change in the workplace whenever it seeks to disrupt an organizational norm. Compelling benefits of innovation change are the key driver of meaningful adoption when it comes to new process, including process enabled by technology - which can present it's own set of potentially intimidating barriers.

Benefits of innovation change outcome must be prominently communicated and featured to those who will be impacted by implementation of new process. Sponsors, initiators, respondents, and end recipients of the service process must share mutual outcome benefits within a truly innovative change model. Examples of benefits can be things such as simplicity,

ease of use, efficiency, accuracy, agility, predictability, or quality.

When staff understands and embraces beneficial outcomes of implementing innovation change, the adoption of new process becomes a positive undertaking. Driving benefits of innovative change further serves to provide benchmarks for new process evaluation by establishing criteria to which metrics can be attributed and measured.

Innovation Change Benefits	**Policy & Process**
Workflow & Behavior	**Expectation & Rewards**

Policy & Process:
An ideal process not only creates value, but it is also satisfying for people to perform, managers to manage, and patients to experience. It involves the set of actions or steps, each of which must be accomplished properly in theproper sequence at the proper time to create value for a patient. *Primary* processes serve the external customer (in health care, patients and their families). *Internal* processes serve internal customers/staff in support of the primary process. Primary processes are easier to see, but internal processes are necessary to create value in the primary process.

Compared to other industries, healthcare has been slow to identify who the customer really is. Because of the complexity of the healthcare system, internal customers — providers, regulators, payers, have often driven processes. It is critically important that the primary customer define value: the patient. A perfect process creates precisely the right value for the customer. In a perfect process, every step is valuable (creates value for the customer), capable (produces a good result every time), and available (produces the desired output, not just the desired quality, every time), adequate (does not cause delay), flexible, and is linked by continuous flow.

It is critically important in the implementation of technology enabled innovative change that the desired outcome be the driver of policy as opposed to the technology itself. Policy must mutually serve process sponsors, initiators, respondents, and end recipients while addressing critical regulatory and environment requirements in a manner that serves to ensure realization of desired outcomes.

The INCA™ approach to policy & process is one that focuses on the desired outcome of innovative change and applies principles accordingly. Both policy as well as process must drive the benefits associated with implementation of technology enabled innovative change. In other words, design of policies and process should be undertaken with integral commitment to the achievement of desired outcomes.

Innovation Change Benefits	Policy & Process
Workflow & Behavior	Expectation & Rewards

Workflow & Behavior:

As the primary precept of the INCA™ approach, workflow & behavior represent the most powerful adoption elements of innovation change. The careful and insightful learning of workflow roles, tasks, and synergies is fundamental to implementing a new process. By assessing gaps between the desired outcome of an innovation change and the existing workflow, a change engineer is capable of spotting opportunity as well as risk. Champions for innovative change can many times be identified during the assessment phase of implementation as well.

Workflow must be approached as a dynamic and synergistic continuous exchange of information. Critical touch points in this exchange often provide opportunity for innovation change to occur, as well as for redundancy, error, waste, and inefficiency to be addressed. Workflow engineers can match innovation change processes and outcomes to workflow opportunities. The role of each person in the workflow new process should be considered as either integral or ancillary to the implementation of the process.

Documentation of workflow in language and format that is most relevant and usable within a workgroup can be very helpful in successful implementation of innovation change. Redesign of workflow is often best tested and refined when it is approached as a phased activity supported by user feedback and acceptance. Desired innovation change outcomes must be featured prominently in the implementation of workflow redesign for meaningful adoption to occur.

Ultimately, the behavior of people engaged in the implementation of innovation workflow change will be the determining factor of success. Workflow engineers must demonstrate excellent interpersonal skills along with the ability to influence behavior. Behavior is commonly driven by an individual's style, perception of risk and reward, and by feedback. Technology enabled innovation process adoption frequently presents challenge for people whose behavior patterns exhibit propensity to resist change. For these individuals it is particularly critical that benefits of desired change outcome and mutually shared benefits be strongly reinforced, and that feedback be based on well-defined mutual benefits.

Innovation Change Benefits	Policy & Process

Workflow & Behavior	Expectation & Rewards

Expectation & Rewards:

To the greatest extent, satisfaction and the perception of value derived from new process implementation will be predicated on relative expectations along with the degree of reward that was gained. In other words, a process implementation will be measured as successful based on what was expected initially, and how much value the innovation change produced.

Innovation change sponsors, initiators, respondents, and end recipients a service process will share not only mutual outcome benefits but, potentially, mutual outcome disappointments as well. A critical element for driving the achievement of positive results is the definition of specific, measurable, and realistic desired outcomes. In this model, technology features and limitations should not dictate the expectations established of the innovation change, rather, they should be considered relative to the process implementation. Technology will support the process implementation but must not get in the way of desired outcomes. By defining expectations based on innovation change instead of by process implementation limitations, organizations can create synergistic opportunities to use technology as part of an overall change approach.

An example of how expectations can be set based on innovation change desired outcomes might involve mapping the benefits designed to result from a new process, then matching those benefits with the workflow touch points that contribute to the achievement of an outcome. In the case of a more efficient referral, as an example, the innovation change would be to facilitate more complete exchange of information between providers, and the workflow touch points might involve gathering of clinical notations for data entry into a technology application and processing according to a pre-established best practice.

In this case, the technology enables innovative process change and facilitates the desired outcome/expectation. Satisfaction and perceived value derived from new process implementation will be based on the effectiveness of the workflows as well as the utilization and the degree of reward will be based on meeting the expectation of a more efficient referral.

The model for technology enabled innovation process change demands a high degree of continuous engineering support to provide feedback and validation for expectations being met. In the absence of feedback and validation, the opportunity to assess and correct workflow gaps can be missed, and stakeholders can be left without a sense of whether expectations are being met. The value created by using an innovation change approach is that of achieving desired outcomes instead of simply completing a technology implementation.

Innovation Change Benefits	Policy & Process
Workflow & Behavior	**Expectation & Rewards**

Conclusion

L.A. Care Health IT & Innovations, lead by Sajid Ahmed, conducted a proof-of-concept applications based on the belief that the most successful process improvement change model reverses the view of that the successful implementation of technology is main outcome. The focus is on the workflow and the innovative process as the desired outcome. Innovation processes designed to disrupt existing workflows can be enabled by technology; however, it is user adoption and integration of new workflows that ultimately ensures success of the innovation process, the technological transformation and process improvement activities.

Innovation change is a shift of approach to desired process as opposed to simply a modification of existing workflows. Learning to simply substitute one process for another leads to an inherent limitation for realizing the value of innovative change. The value is created when new process is implemented as an outcome of embracing the benefits of innovation change. Users of technology who are empowered to understand the desired change outcome are best positioned to innovate, implement and maximize benefits of technology.

Implementing process change that is enabled by technology requires the technology be used in a manner that is highly sensitive to supporting effective and synergistic touch points within a system. Workflow must be approached as a dynamic and synergistic continuous exchange of information. Ultimately, the behavior of people engaged in the implementation of innovation workflow change will be the determining factor of success.

The success of new process implementation will be based on what was expected initially, and how much value the innovation change produced. Innovation change sponsors, initiators, respondents, and end recipients of a service process will share not only mutual outcome benefits but, potentially, mutual outcome disappointments as well. A critical element for driving the achievement of positive results is the definition of specific, measurable, and realistic desired outcomes.

The INCA™ approach is based on four primary precepts:
- Benefits Orientations
- Policy & Process Evaluation
- Workflow & Behavior Mapping

- Expectation & Rewards

The model for technology enabled innovation process change demands a high degree of continuous engineering support to provide feedback and validation for expectations being met. The value created by using an innovation change approach is that of achieving desired outcomes instead of simply conducting technology implementation. Rewards can be magnified through using this model effectively.

Glossary of INCA™ Terms

Innovation Change: The intellectual purpose and effect of original, identifiable alterations to the design and functioning of a system of operations, relationship between stakeholders, or utilization of resources based on creative design strategically undertaken to create radical reformation.

Process Implementation: The act of putting into place those procedures, steps, tasks, functions, interactions, exchanges of information, communication, documentation and other elements of work that result in replicable performance.

Outcomes: The product and effect of work processes that can be identified, measured, and contrasted against desired results.

Benefits: Positive aspects derived from engaging in innovative change and new process implementation that serve to strengthen, improve, or enhance the experience and/or value of work.

Workflow: Procedures, steps, tasks functions, interactions, exchanges of information, communication, documentation and other elements of work that contribute to implementation of process.

Engineering: The activity of assessing, defining, redesigning and coaching people engaged in the implementation of process for work innovation change.

INCA™: Innovation Change Approach" model