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# The 7 Key Components For An Effective Case Management Methodology

A BeyeNETWORK White Paper

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# INTRODUCTION

## THE OVERLOOKED VALUE OF CASE MANAGEMENT

**Do not overlook the value of case management to improve quality, efficiency and profitability**

Case management is being overlooked as a care delivery framework with the potential to relieve three of the most significant pressures facing hospital leaders – to improve clinical quality, to increase operational efficiency and to improve profitability. Furthermore, case management capabilities are underutilized in the healthcare delivery organizations and areas that need its value the most.

The pressure to improve clinical quality is increasing in intensity from the federal government, from payers and purchasers, from quality standards organizations and from patients themselves. We see this in the steep rise in regulatory compliance demands, pay for performance (P4P) contracts, clinical quality improvement initiatives and public reporting of clinical quality measures.

The pressure to increase operational efficiency is also coming from many of these same groups, as well as from the sharp increase in competitiveness in the marketplace. We see this in the increased competitiveness in terms of speed of care delivery, improvement of the patient experience, delivering more care services despite the shortage of physicians and nurses, and in the drive to differentiate our services.

The pressure to improve profitability is ever-present as hospitals and other healthcare delivery organizations must answer to investors, communities and governmental agencies. We see this in the rise in reimbursement pressures, cost and waste reduction pressures, productivity and efficiency pressures, the push to develop and implement new revenue streams and alternative care delivery models, and in the increasing demand for uncompensated care.

**Case management practiced in just over 60% of U.S. hospitals**

A recent study published in *Nursing Economic$* indicated that case management is practiced by only 61% of non-federal acute care hospitals in the U.S. [1]. This study also showed a strong correlation between the existence of case management practices and a number of positive measures of business success. Some examples include:

| Measure | Hospitals Using Case Management | Hospitals Not Using Case Management |
|---|---|---|
| Number of Hospitals | 2725 (61%) | 1714 (39%) |
| Average Beds | 194 | 100 |
| Return on Assets | 2.8% | -0.46% |
| Occupancy | 59% | 52% |
| Number of Services | 34 | 15 |
| Average Cost per Discharge | $12,689 | $15,697 |

These are only correlations and not necessarily causal relationships. The purpose of this paper, however, is to illustrate a number of ways in which hospital case management can and does produce clinical, operational and financial benefits for the organization.

## ACHIEVING QUALITY, EFFICIENCY AND PROFITABILITY

Not only is hospital case management being underutilized, but also, like management in general, there is a right way and a wrong way to conduct this practice.

**Managing the right way: Design in quality**

Sixty years ago, W. Edwards Deming taught us that traditional management practices attempted to "inspect in" quality, efficiency and profitability. By this, he meant that organizations were doing things backwards. They were buying resources, hiring workers and performing processes to deliver results, and only then were they checking to see if the results were of good quality. Under such practices, rework and waste are high.

In healthcare, this manifests itself in a number of ways. For instance, utilization reviews are used to check and correct clinical quality problems after they occur. Disciplinary measures are used to attempt to fix operational problems after they happen. And claims resubmissions are used to reverse reimbursement denials. Millions of dollars are spent on patches to fix these problems and millions more are wasted on rework, reprocessing, pain, suffering and even death.

**Managing the wrong way: Inspect in quality**

By contrast, the right way according to Deming is to "design in" quality, efficiency and profitability. In other words, design and develop processes, procedures and tools to make it more difficult to do things the wrong way than it is to do things the right way.

Examples of this in healthcare include evidence-based clinical guidelines and protocols designed using team collaboration. Processes and procedures are designed using Lean and Six Sigma practices. And intelligent revenue cycle management systems are used to improve reimbursement rates by proactively alerting management to potential denials.

These measures to manage organizations using intelligent design have done a great deal to predict and prevent problems in healthcare delivery organizations. But there are two other dimensions to doing things the right way that have been overlooked.

**Beyond design, actively manage and evolve business practices**

The first is *active, ongoing attention to managing the care process* to make sure the people, processes and technologies are not drifting from the design. This is where case management comes in.

The second additional dimension is *the evolution of the people, processes and technologies to further improve their performance and make it easier, faster and better to do things the right way*. This is where a sophisticated case management methodology comes in.

# THE CASE FOR HOSPITAL CASE MANAGEMENT

The *Nursing Economic$* study just mentioned indicated that over 60% of the hospitals in the United States are currently using case management in some form. The other 39% are presumably using one or more of the other types of care delivery frameworks in their operations, such as managed care, patient-focused care, differentiated practice, shared governance, functional methods, team nursing or primary nursing.

**Your organization may already be using case management in another form**

Two questions come to mind. First of all, for the hospitals using one of these other frameworks, are they actually using case management techniques without realizing it and therefore not getting the full benefit of the frameworks? Many of these frameworks are actually derivatives of the case management methodology. While case management is best practiced in whole, adopting elements of the framework can also be beneficial. This would allow those using other frameworks to improve their performance without scrapping their current overarching care delivery processes.

**Ad hoc case management versus case management as a methodology**

The second question focuses on the 61% currently practicing case management. Are these organizations getting all they can out of the practice? As we will see, there is a distinct difference between performing case management in an ad hoc fashion versus developing and using a sophisticated, strategic approach. The latter is referred to as a case management methodology.

During February and March 2010, the BeyeNETWORK conducted a survey to gauge the potential for hospitals and other healthcare organizations to benefit from developing a case management methodology. Questions on this need included:

| **Growth.** Are your case management services growing? | |
|---|---|
| Yes | 82% (Of these, 27% indicated high growth.) |
| No | 18% |

**Drivers for case management growth**

The reasons for this growth involve increased complexity and quality requirements:

| **Drivers.** What are the key drivers for the growth of case management activities in your organization? *(Respondents could choose more than one answer.)* | |
|---|---|
| Increase in complexity of care processes | 55% |
| Quality requirements | 50% |
| Increase in number of payers paying for case management services | 45% |
| Increased patient volume | 30% |
| Regulatory requirements | 25% |

On the other hand, the viability and effectiveness of these services is greatly threatened:

| **Threats.** What are the greatest threats to profitability of your case management activities? *(Respondents could choose more than one answer.)* | |
|---|---|
| Increasing labor costs | 50% |
| Performing services without reimbursement | 46% |
| Decline in eligibility of services | 36% |
| Inefficiencies in processes/tools being used | 34% |
| Declining reimbursement rates | 28% |
| Increasing costs of partner contracts | 26% |
| Compliance reporting requirements | 20% |

**Threats to case management profitability**

And the clinical effectiveness is not up to the level expected, which has an impact on the organization's financial effectiveness:

| **Staying beyond discharge.** On a weekly basis, how many patients stay beyond planned reimbursement (planned discharge date)? | |
|---|---|
| 11 or more patients | 70% (Of these, 25% indicated 21 or more patients stayed beyond the planned discharge date.) |

Furthermore, despite the efforts of these organizations, as many as one in ten patients snaps back into the same conditions that the services were intended to alleviate.

| **Recidivism.** What percentage of your discharges is affected by recidivism? | |
|---|---|
| Respondents indicating 10% | 39% |
| Respondents indicating 7% | 31% |
| Respondents indicating 5% | 23% |

Unnecessary procedures are a key driver for profitability challenges:

| **Unnecessary Procedures.** What is the value of paid procedures later determined to be unnecessary by the utilization review committee on a monthly basis? | |
|---|---|
| $25,001 to $50,000 | 45% |
| $10,001 to $25,000 | 28% |
| Less than $10,000 | 17% |
| More than $50,000 | 10% |

Although their intent may be to "design in" quality, nearly half of the respondents' organizations are losing at least $300,000 annually because their processes are actually designed to "inspect in" quality.

Healthcare organizations are currently incurring losses in terms of reduced patient care effectiveness, lost efficiency, declining revenues and diminishing profits. This situation will only increase as more focus is placed on preventing readmissions and Never Events (i.e., events determined by the Center for Medicare and Medicaid Services to never happen), and on reducing unreimbursed care.

In this era of paper-thin margins, no organization needs to lose money due to a lack of sophisticated management practices. Consider this:

| **Penalties.** How much is your institution penalized on a yearly basis because you are not meeting clinical and/or IT norms? | |
|---|---|
| 6% to 10% of net profit | 43% |
| 1% to 5% of net profit | 28% |
| Less than 1% of net profit | 17% |
| Greater than 10% of net profit | 6% |
| Don't know | 6% |

## A SOPHISTICATED CASE MANAGEMENT METHODOLOGY

Our research indicates that there are two levels of case management practice. The first is ad hoc case management and the second is the development of a case management methodology. The former, as one might imagine, is more primitive and not nearly as effective as the latter.

**Benefit by developing a case management methodology**

The differentiating factor between the two levels is the degree of dedicated attention put into case management before actually performing it. While a hospital or other healthcare delivery organization may put a great deal of thought, preparation and repeated practice into responses to emergency or other clinical situations, those same organizations may not be putting the same attention into developing a methodology for guiding patients through the complex processes of receiving effective care.

A hospital's or healthcare delivery organization's case management methodology needs to be repeatable, scalable and adjustable to changing environments. It needs to be managed and reviewed and integrated with current healthcare information technology systems. To that effect, there are seven key components to design and implement a sophisticated and very successful case management methodology:

- Capability Strategy
- Repeatable Design
- Standardized Setup
- Internally Integrated Workflow and Toolset

- Externally Integrated with Operational Systems
- Managed Evolution
- Externally Integrated with Analytical Applications

Each of these components is defined in the following pages, including details on the value each provides, the business requirements, the people involved, and tools and technologies to support the component. Where applicable, the ASG-Cypress solution is used to illustrate the solution to the organization's need.

## ANALYSIS METHODOLOGY

This paper is the culmination of input from several sources, including:

- **Survey**. Conducted by BeyeNETWORK, this survey asked respondents a number of questions along the lines of case management strategy, process design, staffing, information tool support and practice evolution as well as clinical, operational and financial outcomes. There were 103 responses.
- **Literature review**. Several studies and best practices in the area of case management were reviewed to supplement the BeyeNETWORK survey. These are listed at the end of this document.
- **Interviews with ASG**. Several interviews with ASG were conducted for an in-depth understanding of business requirements and implemented solutions across their hospital client base.
- **SME review**. The summarized results of the survey and the literature were further reviewed by a group of subject matter experts in case management, including vice presidents and directors of nursing and case management, chief financial and operational officers, physicians, nurses, social workers, software development project managers, Lean project leaders, consultants and hospital department managers.
- **Project notes**. The authors' notes from various engagements in case management strategy, design, development and enhancement were used to further validate the survey and literature review results.

## ABOUT ASG AND ASG-CYPRESS

**Product Suite**

The ASG-Cypress Suite of products is a modular, integrated document assembly and delivery system that significantly enhances the management, accessibility, analysis and distribution of content throughout an enterprise. This system can be rapidly deployed and requires little or no user training. The ASG-Cypress Suite can capture and store any document, regardless of the format, application or environment in which it was created. Optionally, any metadata, rights, permissions and privileges available from the application can be included with the document. Once captured, documents or individual pages can be easily searched, retrieved, assembled and delivered by the ASG-Cypress Suite.

| | |
|---|---|
| **Where we are going** | Currently, more than 30% of ASG employees focus exclusively on product development enhancement and maintenance, in order to ensure ASG products respond to the changing needs of its clients. |

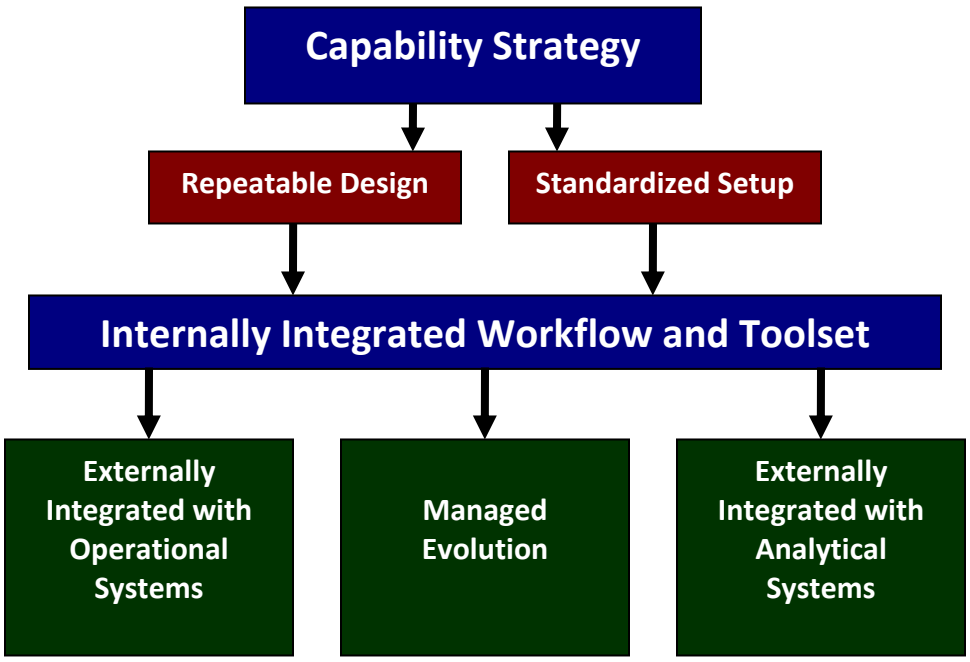
# CASE MANAGEMENT REQUIREMENTS AND TOOLS

## COMPONENTS OF A SOPHISTICATED CASE MANAGEMENT METHODOLOGY

In order to realize the benefits and minimize the challenges just described, hospital organizations may have to think differently about their case management services. These organizations need to view case management as a methodology, as a standardized, repeatable, portable and evolving practice.

**Figure 1: Seven key components of a case management methodology**

This section describes seven key components of that methodology. Readers will find that if they are already using a case management methodology as a care delivery framework, this will be a checklist for maturing their implementation. For those organizations that are contemplating using this methodology, or are not familiar with it, this section will provide a roadmap to building out this methodology most effectively.




These seven components are described in detail below. While each of these could be developed independently by a hospital or healthcare provider, they are best built as a comprehensive set for greatest effect.

## CAPABILITY STRATEGY

**Case managers evolving into outcomes managers**

Case managers themselves are evolving from being discharge planners and care coordinators into becoming "outcomes managers." Implied in this new role is the responsibility for the clinical outcomes of the patients and for contributing to the

financial and operational outcomes of the case management program within the hospital. Leading and supporting this enlarged role requires an equally large strategy.

A case management capability strategy has three key elements:

- **Accountable leadership**. Tie-in to the strategic objectives, initiatives and goals of the larger organization.
- **Rollout and release**. The intent to reproduce the success of the case management function across the organization.
- **Managed evolution**. Continuous improvement to keep it aligned with trends in patient needs, with clinical and operational innovations and with changes in the business climate.

Tying the strategy to the larger organization requires leaders who are accountable for clinical quality, patient safety, productivity, efficiency and financial success. For this role, most of the organizations surveyed indicated that their case management function is led by an officer of the enterprise:

| **Leadership.** What role in your organization has ownership of the case management function? | |
|---|---|
| Director of Nursing | 32% |
| Director of Case Management | 28% |
| Vice President | 21% |
| Clinical Manager | 14% |
| Other (e.g., consultants, business analysts, etc.) | 5% |

Not only do the people at the vice president or director level have responsibility to achieve the organizational goals mentioned above, they also have the visibility and the authority necessary to realize the second key strategic element – reproducing the program's success.

**A methodology can be piloted and rolled out**

Case management can be developed as a pilot in a specific department and rolled out to other departments as it is refined. Or it can be developed in a particular practice area and rolled out to other practices or to hospital departments as desired and feasible. For instance, case management could be piloted in oncology and then ported to orthopedics. Or it could be piloted in family practice and then reproduced in pediatrics.

A case management methodology, like any management function, will become stale without continuous attention to the trends affecting it. For example, patient populations often become older in certain market areas and then renew as new families move in. Case managers need to recognize this and adjust their services to match.

To make the methodology as efficient, effective and portable as possible requires a capability strategy.

## REPEATABLE DESIGN

If the intent is to port the success of the methodology from one department, practice or specialty to another, then that methodology needs to be designed with modularity. Doing this means that the goals, roles, responsibilities, processes, procedures and tools are well defined in order to achieve the organizational goals of reduced recidivism, penalties, rework and waste.

**Repeatable design requirements**

The requirements for this design include:

**Process design**. Define the roles, tasks, timelines, signals to open/close cases, info flows, etc.

Note that even in the best organizations, this is not always done to great satisfaction.

| **Staff frustration.** Which of the following complaints causes the greatest frustration for your case managers? | |
|---|---|
| Processes are not designed efficiently | 61% |
| Delays in receiving information from partners | 29% |
| Tools are not helpful | 10% |

**Staff the process**. Identify types and numbers of case managers (RN, Social Worker, Occupational Therapist, etc.), define job descriptions and fill positions.

| **Case managers.** How many case managers are on staff? | |
|---|---|
| 10 to 25 | 55% |
| 26 to 40 | 35% |
| More than 40 | 10% |

It is essential to be efficient due to the volume of patients requiring case management services.

| **Caseload.** What is the average patient load per case manager? | |
|---|---|
| 21 to 35 patients | 43% |
| 10 to 20 patients | 37% |
| More than 35 patients | 20% |

**Create SOPs**. Convert process tasks into standard operating procedures (SOPs) so they can be learned, performed and taught efficiently and reliably.

**Create escalation process**. Define methods for determining case complexity and triggers for escalating cases to higher-level managers. This improves efficiency and patient satisfaction.

**Prioritize caseload**. Determine which cases require attention first and why, based on patient needs, acuity levels and financial considerations.

Designing the case management processes for repeatability helps case management leadership to make it as efficient, effective and reliable as possible and to multiply its value many-fold across the organization.

**ASG-Cypress Supports Repeatable Design**

ASG-Cypress accomplishes this through a number of mechanisms.

First of all, the system is designed to be modular. This means that it can be deployed in whole or in parts in any department, practice or function in the organization.

Another mechanism is the use of a centralized information repository called the ASG-Cypress DocuVault. Documents such as process flowcharts, process narratives, escalation paths and SOPs can be loaded, stored and disseminated to case managers and leaders as needed. Access is granted using role definitions and security instructions held by the system.

## STANDARDIZED SETUP

Setting up the resources needed to perform the case management processes is where the methodology becomes real. This includes defining the forms, pathways, educational materials and partnerships needed to get the work done.

Standardizing these resources further multiplies the benefits of a capability strategy and repeatable design. Case managers have more confidence in the resources they are using because they helped to create them. Patients and families have more confidence in their case managers. The hospital benefits operationally and financially because the resources used in one department or practice serve as the foundation for the next department or practice.

### Standardizing forms and materials

Setting up the case management methodology requires the ability to:

**Create forms**. Gather forms from outside agencies and create your own forms. This provides consistency in your services and gives you a jump start in offering them.

**Update forms**. Gather updated forms from outside agencies and update your forms. This gives your organization the ability to use the freshest content, organization and knowledge on the topic.

**Write standardized contracts with client agencies**. Write agreements with departments, agencies, etc. who feed cases to your organization.

**Standardizing partnerships**

**Contract with standard partners**. Write agreements with other departments, agencies, independent case managers, etc. who assist your team with managing cases. Standardizing this set of partners keeps your quality high.

| **Outside agencies.** On average, what is the number of outside agencies one of your case managers works with to complete a case? |
|---|
| While the number of agencies range from one to 30, the average is 10 agencies per case manager. |

**Standardized critical pathways and educational materials**

**Design standardized critical pathways (templates)**. Define standard categories of conditions and actions to manage such as daily outcomes, tests and treatments, knowledge deficit, psychosocial, diet, activity, meds, transfer/discharge plans. Also define when to manage each category.

**Create patient education materials**. Gather information to assist patient in understanding and following the critical pathway instructions.

| **Forms creation.** How does your organization create and manage case management forms, clinical pathways, patient educational materials, etc.? | |
|---|---|
| Team collaboration | 47% |
| Facilitated by another department inside the organization | 38% |
| Purchased service | 14% |

Standardizing forms, pathways, educational materials and partners improves and maintains a high level of quality and allows the case management methodology to be rolled out consistently.

### ASG-Cypress Supports Standardized Setup

ASG-Cypress extends the capabilities described in the Reusable Design component significantly when it comes to Standardized Setup.

The two primary features that help hospital organizations accomplish this standardization are through the use of common data formats and by using the ASG-Cypress DocuVault repository described earlier.

Common data formats allow the organization to create and update the various forms used in case management, to create and manage the critical pathways and to capture and/or create patient education materials. Many people are not aware of this, but all electronic documents are comprised entirely of data, in the form of labels, content and formatting commands. ASG-Cypress uses this fact to essentially "boil" any document down to its data elements. This gives it the latitude needed to take in any document from any source and manipulate it for multiple purposes.

The ASG-Cypress DocuVault repository is used to store these components until they are needed by case management staff. They are then assembled and delivered at the time and place needed. This includes internal staff as well as partner organizations. The use of roles held by the system allows case management leadership to standardize the partner list.

## INTERNALLY INTEGRATED WORKFLOW AND TOOLSET

**Efficiency is everything**

It is critical for performance of your case management methodology to be efficient. Consider this feedback from the BeyeNETWORK survey:

| **Information retrieval.** What is the amount of time permitted to case managers to retrieve information for patients under their management? | |
|---|---|
| 45 minutes | 41% |
| 30 minutes | 30% |
| Less than 30 minutes | 14% |
| 60 minutes | 14% |

An individual case manager has less than an hour to gather the forms, data and materials needed to serve their patients. Forms and documents must be woven together into a cohesive workflow. There is no time to waste.

**Case manager tasks**

In a very short amount of time, the following tasks must happen:

**Assign case**. The system must determine which cases to assign to which managers.

**Open case**. The case manager must acknowledge acceptance of the assignment.

**Create individual critical pathway from templates**. The template must be populated with patient demographic information and known pathway information.

**Determine eligibility and coverage**. The templates must be populated with payer information regarding what services are eligible, the level of coverage, etc.

**Enlist standard partners**. The case manager must select partners as needed to provide services, products and/or information.

**Enlist additional partners**. Identify additional partners, if needed, to provide services, products and/or information that are special for the patient.

**Send information to partners**. Communicate with partners (orders, forms, requests for info, etc.)

**Receive information from partners**. Receive inbound communication from partners (completed orders, completed forms, requested info, etc.)

| **Communicating with partners.** How do your case managers send and receive information to partners assisting with the management of cases? | |
|---|---|
| File sharing | 54% |
| Email | 47% |
| Fax | 35% |
| Access into shared systems | 28% |

| **Attachments.** How do your case managers send and receive attachments to partners assisting with the management of cases? | |
|---|---|
| File sharing | 45% |
| Email | 38% |
| Access into shared systems | 33% |
| Fax | 31% |

**Send information to clients**. Communicate with patients (recommendations, forms, requests for info, etc.)

**Receive information from clients**. Receive inbound communication from patients (questions, completed forms, requested info, etc.)

| **Client communication.** How do your case managers send and receive information/attachments to clients? | |
|---|---|
| Fax | 70% |
| Email | 47% |
| Mail | 36% |

| **Fax volume.** How many total faxes are sent and received each day (in bound and out bound)? | |
|---|---|
| 2,001 to 4,000 faxes | 45% |
| Less than 1,000 faxes | 31% |
| 1,001 to 2,000 faxes | 17% |
| More than 4,000 faxes | 8% |

**Case management documentation management**

The system must also provide the ability to:

**Store completed forms**. Preserve populated forms.

**Retrieve stored forms**. Allow the case manager to use stored populated forms.

**Store attachments**. Maintain documents associated with the case that are not in forms.

**Retrieve attachments**. Allow the case manager to use stored associated documents.

| **Document storage.** What approximate square footage is utilized by your institution for document and/or image storage? | |
|---|---|
| 2,000 square feet | 47% |
| 1,000 square feet | 24% |
| More than 2,000 square feet | 23% |
| Unknown | 7% |

**Closure of case management tasks**

Then, as the case manager is working the case to successful completion, he or she must have the ability to:

**Escalate case**. Enact a predefined process for escalating a case to more senior case managers, to other providers or to the director.

**Submit clinical review summary of case**. Finalize documentation of the case.

**Close case**. Relinquish the assignment and move on to the next case.

Case managers must be very efficient in their work. As you can see from these tasks, most of them are administrative in nature. Every minute spent on administrative tasks is a minute taken away from direct patient care.

The systems that support the case managers must be just as efficient. Every minute gained through the use of the system is another minute put toward direct patient care.

## ASG-Cypress Supports an Internally Integrated Workflow and Toolset

This is where ASG-Cypress really shines. Once the repository has been established, the roles and security authorizations defined and the various forms created, then the system can be used to its fullest.

Case managers, as mentioned above, need efficient access to information for specific patients in order to handle specific cases for them. ASG-Cypress assembles the correct forms, detects the correct patient data, pre-populates the forms, gathers the correct attachments and delivers it in a bundle to the case manager.

Attachments present an extreme challenge for most applications because they are in a variety of formats, shapes and sizes. Examples include PACs images, medical dictation, EKGs, etc. Since ASG-Cypress treats all documents as distilled data and codes, this difficulty is eliminated.

Basic documentation like hospital face sheets, admission packets, surgery packets, patient transfer forms, consent for care forms, discharge instructions, etc. are also easy to create, populate, tag and route as needed.

Workflow is accomplished using role and security definitions, so activities such as assignment of cases, opening them, escalation, summarization and closure are managed within the application.

## EXTERNALLY INTEGRATED WITH OPERATIONAL SYSTEMS

**Case management function must share information with larger hospital environment**

The goal of developing a case management methodology is to be able to drop it into any number of departments or practices and have it operate efficiently and effectively. Nevertheless, no process, function or methodology can operate as an island. It must be interconnected with the processes, functions and capabilities around it. And it must communicate with that external world.

As a matter of fact, the changes that have occurred in case management software mirror this requirement for external integration. Twenty years ago, one could find three dozen companies offering case management software applications. Most are now gone. There are several factors for this, but the biggest reason is that they were standalone systems and had no integration with external operational systems. They were, in effect, islands. Only those systems designed to share data, both inbound and outbound, survived.

Some of the external operational systems that case management applications need to connect to include billing, electronic health records (EHRs), scheduling, general ledger, payer reporting systems and regulatory reporting systems.

**Inbound and outbound information flows**

The billing system needs information on the services performed in order to receive reimbursement. EHRs provide demographic data to populate case management forms and receive information from the case management application to record clinical services performed and outcomes achieved.

Scheduling is also a two-way street, providing availability information and receiving case manager and partner services to be performed. The general ledger records the financial details of these services.

Payer reporting systems receive information on nursing assessments, patient statuses, clinical outcomes and of course, claims. Regulatory reporting systems receive similar information to ensure compliance with legal and quality standards.

In order to support the creation and rollout of a sophisticated case management methodology and increase its durability, the case management system and the function itself must be externally integrated.

**ASG-Cypress Supports External Integration with Operational Systems**

ASG-Cypress shares data with operational systems (both inbound and outbound) using common platforms and technologies such as health information system (HIS) servers, HL7 gateways, XML and EDI formats, and UNIX, LINUX and Windows operating systems.

## MANAGED EVOLUTION

Case management itself is founded on the premise that dedicated attention during the process and constant focus on the goals of that process will produce superior clinical and financial results. The same is true for the management of the organization's case management function. In order for the methodology to continue to produce results, and to produce more of those results, it must be perpetually evolving.

**Deliberate, managed evolution**

One differentiator for a mature case management methodology is that this evolution is managed. It is deliberate.

The chief complaint for case management staff and leaders alike is that the processes are inefficient. Managed evolution solves this problem.

| **Leadership challenges.** What is the number-one complaint for case management leadership? | |
|---|---|
| Inefficiencies in processes | 39% |
| Patient demands | 20% |
| Partner relationships declining in quality, but increasing in cost | 17% |
| Reimbursement pressures | 15% |
| Increased level of compliance paperwork | 9% |

The steps to managing the evolution of an organization's case management methodology are basically to take each component and periodically renew it. For instance:

**Evolving processes, models, procedures, forms, pathways and mangement practices**

**Improve process design**. Improve the definition of roles, tasks, timelines, signals to open/close, info flows, etc. This smoothes out the rough edges using experience as the guide.

**Improve staffing model**. Recalibrate the types of case managers (RN, Social Worker, Occupational Therapist, etc.), job descriptions and means of filling positions. This serves to align the clinician skills with the patients' needs.

**Improve SOPs**. Improve the SOPs in order to more effectively learn, perform and teach the methodology.

**Improve escalation process**. Improve the methods for determining case complexity and the triggers for escalating cases to higher-level managers, using experience as the guide.

**Improve caseload prioritization method**. Improve the method for determining which cases require attention first and why.

**Improve standardized critical pathways (templates) design**. Improve the definition of standard categories of conditions and actions to manage as well

as the definition of when to manage each category.

**Improve patient education materials**. Periodically gather updated information to assist patient in understanding and following the critical pathway instructions.

Through reasoned, periodic improvement of the design, processes, materials and skills used in case management, leadership can multiply the clinical, operational and financial benefits of the methodology.

**ASG-Cypress Supports a Managed Evolution**

ASG-Cypress supports Managed Evolution using the features already described (common data formats, the ASG-Cypress DocuVault repository, document management, etc.) as well as some additional features.

The system can distribute fresh versions of the forms, process descriptions, templates and other materials to all appropriate staff members instantaneously and notify those people of the changes.

It can track and date versions of the materials; it also retains all previous versions in order to facilitate the evolution process.

## EXTERNALLY INTEGRATED WITH ANALYTICAL APPLICATIONS

Just as case management does not exist as an island in terms of the hospital's operational systems, it also does not stand alone in terms of its analytical systems.

Analytical applications in a hospital usually fall into various categories such as patient registries, operational statistical analysis systems, financial analysis applications, quality reporting, patient satisfaction monitoring systems and other management analysis and reporting functions.

**Two-way street for information flows**

Like externally integrated operational applications, externally integrated analytical applications work best when communicating with the case management system as a two-way street.

**Case management function benefits**

The case management function benefits with information on trends and patterns in order to better balance caseloads, allocate individual cases among team members, evaluate volume and complexity trends, etc. This helps case management leadership to make decisions regarding staffing, training, development, problem resolution and opportunity capture.

**Larger organization benefits**

Other areas of the hospital or healthcare delivery organization that can use case management data include clinical quality measurement programs, financial analytics

applications, operational time and motion studies, patient satisfaction evaluations and strategic planning applications.

Sharing data produced as a byproduct of performing the case management methodology's activities benefits the entire organization. And by using analytical data from other functions, case management leadership can compound the efficiency and effectiveness of their own function.

### ASG-Cypress Supports External Integration with Operational Systems

ASG-Cypress' repository can be searched at any time for specific information. However, access is restricted to appropriately designated individuals and is routinely monitored. This makes it the ideal launching and landing point for sharing data with the hospital's analytical applications.

Companion applications such as ASG-Safari ReportWriter, ASG-Safari 4GL and ASG-Safari.OLAP can be used to deploy these analytical applications. Alternatively, ASG-Cypress can pull in content from virtually any type of application, and push content out to those same or other applications.

# CONCLUSIONS

Hospital leadership is under significant pressure to simultaneously improve quality, efficiency and profitability, and is employing a number of methodologies and care delivery frameworks to help in this effort.

Of the major frameworks in use, case management is one that is being overlooked. As pressures grow, the need for case management will grow in importance. Complexity in the care processes is increasing, as are quality demands and regulatory compliance requirements. Patients and providers alike are finding the systems of care bewildering and the decisions confusing.

In terms of costs, hospital leaders are wrestling with specific pressures such as increasing labor costs, inefficient processes, patients staying beyond planned discharge, recidivism, unnecessary procedures and clinical quality penalties.

The solution is a case management methodology that is designed, built and managed as a methodology. To be truly effective, a hospital's case management services need to include a capability strategy, a repeatable design, a standardized setup of resources and people and an efficient, internally integrated workflow. In addition, case management services need to be linked externally to the larger organization's operational and analytical systems. To cap this off, this methodology needs a process

of managed evolution to keep it fresh, efficient and effective.

The key benefit of creating a case management methodology is to multiply its effectiveness by replicating it across the organization's patient-facing departments, practices and functions. In this way, your organization can reduce costs, increase quality and streamline its operations.

Supported by effective processes, tools and information, case management can be a powerful weapon to achieve quality, efficiency and profitability in your organization.

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**About the Author**

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