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This three-part series addresses how health care organizations (ie, organized or integrated care systems or large provider groups that receive payment under either a capitated or fee-for-service basis) can improve the quality of transitions among care venues for patients with complex care needs. Poorly executed transitions are associated with inefficiencies and duplication of services that needlessly increase the cost of care and potentially lead to greater utilization of hospital, emergency, post-acute, and ambulatory services. This three-part article includes recommendations for actions that health care organizations can take to improve the quality of care delivered to their patients undergoing transitions. Part I begins with an introduction that is followed by ensuring accountability for patients in transition and facilitating the effective transfer of information. Part II focuses on enhancing practitioners’ skills and support systems and enabling patients and caregivers to play a more active role in their transitions. Part III addresses the need to align financial and structural incentives to improve patient flow across care venues and steps organizations can take to initiate a quality improvement strategy for transitional care.

INTRODUCTION

This article addresses how health care organizations (HCOs) can improve the quality of transitions among care venues for patients with complex care needs. In this report, care transitions are defined as patient transfers from one care setting to another. Although transfers within one particular setting (such as from a hospital intensive care unit to a general medical ward) can be problematic, this article will discuss transfers between care settings including hospitals, skilled nursing facilities (SNFs), the patient’s home, outpatient primary care and specialty clinics, and assisted living and other long-term care facilities. Not all patients undergoing transitions are at high risk for adverse events; however, those with poor transitional care plans are particularly likely to “fall through the cracks.” This article focuses on adults with complex acute or chronic conditions who require care in multiple settings within the health care system.

Transitions from one care setting to the next often parallel transitions in health status.1-3 Patients transferred between sites may have a new diagnosis or a change in functional status that affects their ability for self-care. Since most of these episodes are triggered by acute problems that are unplanned, neither patients nor their families know what to expect, nor do they realize just how vulnerable patients can be during transitions. This is particularly true if the
patient has not returned to his or her baseline physi-
cal or cognitive functional state in the interval
between hospital discharge and the first follow-up
encounter with a health care professional. By default,
coordination and continuity during this particularly
vulnerable time often falls on family, patients, or
other informal caregivers.

In many respects, the term “health care system” is
a misnomer. There are few mechanisms in place for
coordinating care across settings, and often no single
practitioner or team assumes responsibility during
patients’ transitions. Yet there are a number of rea-
sons for why health care organization leadership
should pay attention to the management of care tran-
sitions. Poorly executed transitions are associated
with inefficiencies, potential medical errors, and
duplication of tests and services that needlessly
increase the cost of care by leading to greater utiliza-
tion of hospital, emergency, post-acute, and ambula-
tory services.4–6 The consequences of poorly executed
transitions may also include negative publicity,
patient complaints, and litigation, which require staff
time and resources in order to resolve.

Such challenges related to transitional care pervade
both capitated and fee-for-service payment
mechanisms. Health care plans and provider groups
that are capitated under the Medicare Advantage
(formerly called the Medicare + Choice) program
have the flexibility and incentives necessary to coor-
dinate care seamlessly across integrated settings.
However, in order to capitalize upon this potential,
these organizations need to move beyond traditional
utilization management aimed at monitoring service
use in individual settings to a broader focus that
includes improving the efficiency and effectiveness of
transfers to different venues.

In a fee-for-service payment environment, finan-
cial incentives for ensuring safe and high-quality
transitions do exist, but are somewhat less apparent.
Incentives exist, for example, for acute care hospi-
tals. Many hospitals across the country are operating
at capacity and frequently need to divert patients to
other hospitals.7,8 Hospitals operating in these envi-
nvironments have a financial incentive to facilitate
transfer of complex older patients for whom reim-
bursement is less favorable to other care settings
(such as skilled nursing facilities) to create bed
capacity for patients for whom reimbursement is
more favorable (eg, orthopedic surgery and inter-
ventional cardiology patients). An additional finan-
cial incentive for effective care transitions concerns
rehospitalization. When patients are rehospitalized
for the same condition shortly after discharge, the
hospital may have to cover the costs of the subse-
quent stay under the initial Diagnosis Related
Group (DRG).9 Furthermore, national efforts that
will encourage the adoption of a single quality mea-
sure (ie, the Hospital Consumer Assessment of
Health Plans Survey® [HCAHPS] that will include
items that assess consumers’ experiences with both
the hospital stay and the discharge process)—by
which all participating institutions are judged and
then potentially “paid for performance”—may rep-
resent an additional incentive for hospitals to focus
their attention on ensuring safe and effective dis-
charges.10 Finally, hospital accreditation by the Joint
Commission on Accreditation of Healthcare Orga-
nizations (JCAHO) includes items on continuity of
care for discharged patients.11 For one or more of
these reasons, a hospital operating in a fee-for-ser-
service environment may see that ensuring effective
care transitions is financially advantageous.

Beyond the hospital, facilitating effective care trans-
sitions is also beneficial to skilled nursing and long-
term care facilities. Under the prospective payment
system (PPS), SNFs have a financial incentive to fully
understand a patient’s care needs prior to acceptance
and transfer. Both SNFs and long-term care facilities
often operate at high resident-to-nurse staffing ratios.
More effective cross-site communication can translate
into efficiencies when assessments can be conducted
with the benefit of the information collected in the
prior care setting. In addition, performing effective care
transitions translates into improved patient care quali-
ity and safety.

This article proposes specific strategies for improv-
cing care for patients in transition. Recommendations
are provided for actions that HCOs can take to
improve the quality of care delivered to their patients
undergoing transitions.
ACCOUNTABILITY

Recommendations

Health care organizations should:

1. Establish policies and procedures for patients undergoing transitions and educate contracted or affiliated providers and facilities as to their content.
2. Ensure that patients undergoing care transitions have an identified and responsible practitioner at all times.
3. Establish performance standards for care transitions and monitor performance against these standards.
4. Contract or affiliate only with practitioners and institutions that meet predefined standards.
5. Forge collaborative relationships among providers to establish performance expectations and monitor quality.

Statement of Problem

At an organizational or system level, accountability for care transitions includes contracting or affiliating with institutions or practitioner groups that meet or exceed performance standards and ensuring that this quality is maintained over time. Provider groups are accountable for measuring and monitoring care processes that reflect the quality of care transitions. To accomplish this, quality measures for transitions are needed that can identify problems and potential etiologies. These measures need to assess the extent to which patients are prepared to be transferred and to follow their proposed care plan. Without measurement, there is little opportunity for quality improvement.

In addition, accountability needs to be better defined for individual practitioners. It is often unclear which practitioner is responsible for the patient in the interval between discharge from one setting and admission to another. Additionally, a primary care physician (PCP) may see a patient for follow-up after hospitalization without the benefit of knowing what transpired in the hospital or during home health care. During these intervals, patients are particularly at risk for “falling through the cracks” and not knowing who to call with questions or concerns. The resulting anxiety may generate unnecessary utilization, such as a trip to the emergency department. Patients need to have available to them an identifiable and responsible health care practitioner at all times during this vulnerable period.

Mechanisms to ensure accountability tend to follow the same pattern as health care reimbursement and financing mechanisms (ie, they are structured around care delivered within a single setting). Federal quality assurance programs reinforce care delivery silos by focusing on care delivered within a given setting rather than across settings. Mandated federal data reporting requirements (eg, the Minimum Data Set [MDS] for nursing home patients and the Outcome and Assessment Information Set [OASIS] for home health care patients) do not address issues of quality across transitions. The effort necessary to comply with data reporting requirements can be so demanding that staff have little capacity to respond to the needs of practitioners at the patient’s next site of care.

Currently, regulatory or accrediting bodies pay little attention to the quality of transitions. JCAHO standards include language relating to the exchange of information during transfers, but they do not adequately address the problem. For example, one standard states, “The hospital ensures coordination among the health care professionals and services or settings involved in a patient’s care.” This standard reflects the perspective of the sending institution and not that of the receiving institution. The hospital is merely charged with describing how information is transferred rather than actually demonstrating how well it performs that task. The perspective of the receiving institution needs to be incorporated into such standards.

Proposed Solutions

Enhancing accountability begins with setting expectations for both the sending and receiving health care teams. Table I summarizes the core functions that need to be accomplished in order to meet the needs of patients undergoing transitions. To ensure that these activities are routinely completed for each transition, performance measures should be implemented that address the processes of care delivered to patients in transition. These measures could be used for both internal quality assurance activities and public reporting and accountability.
Three existing measures attempt to assess specific aspects of transitional care. Researchers at RAND Health and the University of California, Los Angeles, developed the Assessing Care of Vulnerable Elders (ACOVE) survey tool, which includes items designed to assess processes of care coordination and continuity that potentially reflect the quality of care transitions.\textsuperscript{12} The Care Transitions Measure (CTM) was developed by researchers at the University of Colorado Health Sciences Center to assess the quality of care transitions from the perspective of the patient or his or her proxy. CTM scores have been shown to be significantly associated with a patient's return to a hospital or emergency department after discharge.\textsuperscript{13} The Patients' Evaluation of Performance in California (PEP-C) survey, which was designed by the California Health Care Foundation for their pay-for-performance initiative, includes items that address the quality of care during transitions.\textsuperscript{14} Table II displays selected items from each of these measures.

In addition to using established measures of transitional care, HCOs can design their own approaches. For example, they can add questions to existing satisfaction surveys such as the HCAHPS to obtain feedback from their patients on the transitional care experience.\textsuperscript{15} Health care organizations can also telephone patients following transitions (e.g., from a hospital to a skilled nursing facility) to discuss their experiences. Finally, HCOs can examine other indicators that may be reflective of suboptimal transitional care, such as recidivism back to the acute care setting.

Performance measurement can then form the basis for continuous quality improvement (CQI) initiatives as well as joint initiatives with network facilities. For

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Table I: Core Functions for Meeting the Needs of Patients in Transition\textsuperscript{21}

<table>
<thead>
<tr>
<th>Both the sending and receiving care teams are expected to:</th>
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<tbody>
<tr>
<td>• Shift their perspective from the concept of a patient discharge to that of a patient transfer with continuous management.</td>
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<tr>
<td>• Begin planning for a transfer to the next care setting upon or before a patient's admission.</td>
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<tr>
<td>• Elicit the preferences of patients and caregivers and incorporate these preferences into the care plan, where appropriate.</td>
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<tr>
<td>• Identify a patient's system of social support and baseline level of function (i.e., how will this patient care for him- or herself after discharge?).</td>
</tr>
<tr>
<td>• Communicate and collaborate with practitioners across settings to formulate and execute a common care plan.</td>
</tr>
<tr>
<td>• Use the preferred mode of communication (i.e., telephone, fax, e-mail) for collaborators in other settings.</td>
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<table>
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<tr>
<th>The sending health care team is expected to ensure that:</th>
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<tr>
<td>• The patient is stable enough to be transferred to the next care setting.</td>
</tr>
<tr>
<td>• The patient and caregiver understand the purpose of the transfer.</td>
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<tr>
<td>• The receiving institution is capable of and prepared to meet the patient's needs.</td>
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<tr>
<td>• All relevant sections of the transfer information form are completed.</td>
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<tr>
<td>• The care plan, orders, and a clinical summary precede the patient's arrival to the next care setting; the discharge summary should include the patient’s baseline functional status (both physical and cognitive) and recommendations from other professionals involved with the patient’s care, including social workers, occupational therapists, and physical therapists.</td>
</tr>
<tr>
<td>• The patient has a timely follow-up appointment with an appropriate health care professional.</td>
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<tr>
<td>• A patient of the sending health care team is available to the patient, caregiver, and receiving health care team for 72 hours after the transfer to discuss any concerns regarding the care plan.</td>
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<tr>
<td>• The patient and family understand their health care benefits and coverage as they pertain to the transfer.</td>
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<table>
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<tr>
<th>The receiving health care team is expected to ensure that:</th>
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<tr>
<td>• The transfer forms, clinical summary, discharge summary, and physician's orders are reviewed prior to or upon the patient's arrival.</td>
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<tr>
<td>• The patient's goals and preferences are incorporated into the care plan.</td>
</tr>
<tr>
<td>• Discrepancies or confusion regarding the care plan, the patient's status, or the patient's medications are clarified with the sending health care team.</td>
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example, the scope of morbidity and mortality (M&M) conferences routinely held in most hospitals can be expanded to include an examination of poorly executed care transitions as part of a CQI initiative.

Greater accountability also entails ensuring that patients in transition know whom they can contact with questions or concerns. At each point along the care episode, a clearly identified and accountable health care practitioner needs to be available to the patient until the next practitioner assumes responsibility.

There are also steps that HCOs can take to ensure that providers are accountable for the care delivered during transitions to the next venue. Health care organizations can mitigate risk by educating providers, patients, and caregivers about what to expect during transitions. Plans also need to contract with SNFs and home health agencies that have demonstrated the capability for providing high quality care. The contracts should include clear language that provides for the execution of safe transfers and clear lines of responsibility for core activities such as information transfer.

### Recommendations

Health care organizations should:

- Define the essential data elements needed to provide high quality care to patients who are transitioning across sites of care.
- Assure that the essential data elements are conveyed to the receiving practitioners in a timely and accurate manner.
- Develop and maintain user-friendly information systems that facilitate practitioners’ ability to access necessary data elements and communicate with one another across the continuum of care.

### Statement of Problem

The transfer of timely and accurate information across settings is critical to the execution of effective care transitions. The practitioner needs to have an understanding of the patient’s goals, baseline func-

<table>
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<tr>
<th>Table II: Selected Items Pertaining to Transitional Care from Existing Measures</th>
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<tr>
<td><strong>The Assessing Care of Vulnerable Elders Measure</strong>(^{12})</td>
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<tr>
<td>• If a vulnerable elder is discharged from hospital to home and he or she received a new prescription medication or a change in medication before discharge, then the outpatient medical record should acknowledge the change within 6 weeks of discharge.</td>
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<tr>
<td>• If a vulnerable elder is discharged from hospital to home and survives at least 4 weeks after discharge, he or she should have a follow-up visit or documented telephone contact within 6 weeks of discharge, and the physician’s medical record documentation should acknowledge the recent hospitalization.</td>
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<tr>
<td>• If a vulnerable elder is discharged from hospital to home, there should be a discharge summary in the outpatient physician or nursing home record within 6 months.</td>
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<tr>
<td><strong>Care Transitions Measure</strong>(^{13})*</td>
</tr>
<tr>
<td>• The hospital staff took my preferences into account in deciding what my health care needs would be after discharge.</td>
</tr>
<tr>
<td>• Before I left the hospital, the people that were going to help me when I got home clearly understood what my health care needs were.</td>
</tr>
<tr>
<td>• Before I left the hospital, I had a phone number I could call day or night to get answers to my questions.</td>
</tr>
<tr>
<td>• Before I left the hospital, I clearly understood how to take each of my medications.</td>
</tr>
<tr>
<td><strong>Patients’ Evaluation of Performance in California Survey</strong>(^{14})</td>
</tr>
<tr>
<td>• Transition to home: How well did doctors and nurses explain what to expect after patients leave the hospital?</td>
</tr>
<tr>
<td>• Coordination of care: How organized and efficient were doctors, nurses, and other hospital staff?</td>
</tr>
<tr>
<td>• Respect for patient preferences: Did the patient feel treated with respect and as a partner in the health care process?</td>
</tr>
<tr>
<td>• Involvement of family and friends: Did hospitals encourage the involvement of family and friends?</td>
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</tbody>
</table>

* To obtain the Care Transitions Measure, send an e-mail to Eric.Coleman@uchsc.edu.
tional status, active medical and behavioral health problems, medication regimen, family or support resources, durable medical equipment needs, and ability for self-care; otherwise, they may duplicate services, overlook important aspects of the care plan, and convey conflicting information to the patient and informal caregiver. Transferring incomplete information can result in critical errors, such as the patient returning home without life-sustaining equipment (eg, supplemental oxygen or equipment used to suction respiratory secretions). Furthermore, a lack of understanding of the patient’s functional health status, including both physical and cognitive, may result in a transfer to a care venue that does not meet the patient’s needs.

Few HCOs have implemented policies and procedures or adopted technology systems to ensure that relevant patient information is transferred across settings in a uniform and timely manner. A study conducted in 2002 by the Gartner Group, an independent technology consulting firm, found that the health care industry invests less of its gross revenue in information technology than other industries (2.45% vs 3.94%). Policies and procedures that HCOs have developed for information transfer may be difficult to apply to patients admitted to nonaffiliated or noncontract hospitals, which can occur, for example, when the contract hospital is full and diverts patients to other facilities.

There is often a lack of agreement about what comprises the core clinical information that all practitioners require, irrespective of setting. Typically, each institution has an intake and assessment tool that is unique to its particular setting, thus contributing to inefficiency and limiting cross-venue collaboration. In addition, practitioners in one setting may not trust the accuracy of data collected in another setting and therefore may duplicate tests out of concern for legal liability. Different health care institutions also have little financial incentive to create compatible information systems, whether electronic or paper-based. Federally mandated assessment tools (eg, MDS and OASIS) do not aid in this regard since they each have varying requirements. For example, each tool measures the ability to bathe oneself differently. Although this information may have value for regulatory purposes, it is not oriented to managing care transitions.

Proposed Solutions

Health care organizations need to have a standard operating plan for information flow that clearly delineates the type of data to be conveyed to the next care setting, and how this information transfer will be achieved. An essential step is determining which core data elements should be included in the discharge or transfer summary in order to provide the receiving care team with a comprehensive picture of the patient’s baseline health status, recent developments in his or her care, the current care plan, the patient’s goals and preferences, and a summary of what occurred in the sending institution or care venue. Table III includes recommendations for the core data elements that need to be conveyed across the continuum of care. Once HCOs identify the core data elements, they need to determine how best to operationalize this information exchange (eg, voicemail, e-mail, fax, electronic medical record, Web-based medical record, or paper medical record).

Information transfer can also be improved by making the sending institution accountable for ensuring that the information transfer is timely and complete, enhancing information technology, and adopting uniform care planning and assessment tools that include the core data elements described above. Standardization of such a tool would eliminate the need to re-enter data into the medical record at each setting, thereby reducing the potential for error and improving efficiency. Because HCOs frequently affiliate or contract with multiple institutions, the development and implementation of a uniform care plan requires broad-based collaboration on behalf of practitioners, providers, and HCOs within a geographic region.

The State of Massachusetts has created a universal home health authorization form that includes essential information such as the patient’s current functional status, skilled nursing needs, durable medical equipment needs, short- and long-term goals, as well as contact information for the caregiver, attending
Physician, and any vendors. Although created for managed care referrals, such an approach would also be possible in fee-for-service.

Health care organizations can solve some of the problems concerning information transfer by establishing common standards and expectations among affiliated or contracted institutions. They can require their affiliated or contracted SNFs and home health agencies to continuously update a core data set that would follow patients across all settings. At a minimum, HCOs can create protocols for standardized information transfer such that for every patient who is transferred, a standard documentation template is sent to the receiving team. In one study, patients who were recently discharged from the hospital and whose PCP received their hospital discharge summary by the first follow-up clinic were 25% less likely to be readmitted to the hospital.

Although information technology is evolving and offers great potential for improving data transfer across settings, widespread adoption and implementation of interoperable systems is not imminent. At present, only about 10% of health care delivery systems have implemented an electronic health record system. Nevertheless, HCOs can take actions to improve information transfer that do not require a large investment in a comprehensive electronic system. Practices for ensuring that information is accurately conveyed to all providers could be expanded to include other care settings. For example, nursing homes require that every medication listed on the medication administration record

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**Table III: Core Data Elements Needed Across the Continuum of Care (Assess Short-Term and Long-Term Goals*)**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Information Required</th>
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<tbody>
<tr>
<td>Functional status</td>
<td>Baseline (ADLs and IADLs) Current</td>
</tr>
<tr>
<td>Medical status</td>
<td>Summary of admitting problem(s) Most pressing medical problem and prognosis Other medical problems complicating management Comprehensive list of current medications (including prescribed and over-the-counter) Current list of allergies/intolerances</td>
</tr>
<tr>
<td>Self-care ability</td>
<td>Current ability Educational and training needs</td>
</tr>
<tr>
<td>Social support</td>
<td>Primary caregiver (name, relationship, phone number) Ability/willingness to provide ongoing care Community-level support</td>
</tr>
<tr>
<td>Disposition</td>
<td>Where was the patient residing prior to episode? Where is the patient going now? Where will the patient go next?</td>
</tr>
<tr>
<td>Communication</td>
<td>Language Literacy Health beliefs</td>
</tr>
<tr>
<td>Advance directives</td>
<td>Preferences for CPR, ventilator support, enteral/parenteral feeding, hydration, dialysis Power of attorney</td>
</tr>
<tr>
<td>Durable medical equipment</td>
<td>Current needs Vendor’s name and phone number</td>
</tr>
<tr>
<td>Coverage/benefits</td>
<td>Provider network for SNFs, home health agencies, hospice, respite, and durable medical equipment</td>
</tr>
</tbody>
</table>

* Goals take into account the patient’s values and preferences. ADLs = activities of daily living; IADLs = instrumental activities of daily living; CPR = cardiopulmonary resuscitation; SNFs = skilled nursing facilities.
have both a frequency and an indication in order to reduce the likelihood of medication errors. This practice could be extended into other care settings such as hospitals, assisted living, and home health care.

Recent confidentiality requirements enacted under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) have created perceived barriers to information transfer among practitioners working in different health care settings. Some providers have been reluctant to transfer information out of fear of penalty, while some institutions have been observed to be “hiding behind HIPAA” in order to avoid the effort necessary to ensure that essential information is transferred. HIPAA regulations clearly state that appropriate information needed for the ongoing treatment of the patient can be shared among practitioners in different settings.

Information transfer can also be improved through the development and dissemination of related technology. For example, electronic medical records have traditionally been confined to hospital or ambulatory settings; however, these might be expanded to include a wider range of health care venues. If practitioners were able to access information obtained in other care venues, the burden of medical information would be reduced.

Health care organizations can also create opportunities for patients to obtain personal health information over the Internet. For example, HCOs may provide access to a personal health record that allows them to review their recent laboratory results and prescribed medications. This type of information sharing not only facilitates information transfer among practitioners in different settings but also encourages patients to play a more active role in their health care.

Patients can also be encouraged to maintain up-to-date information on their health status, including the elements delineated in Table III, or more limited information such as a medical problem list, medications, allergies, and advance directives. Patients could use a paper record to store the information, or a more technologically advanced modality such as a CD-ROM, a personal data assistant (PDA), or a “smart card” (ie, a credit card–sized tool containing a computer chip that can store health status data). In each of these cases, concerns surrounding patient confidentiality are lessened because the patient controls the ability to share medical information.

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References