Capgemini
CONSULTING.TECHNOLOGY.OUTSOURCING

Health

The National Provider Identifier

Introduction

ON JANUARY 23, 2004, THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) PUBLISHED THE FINAL RULES ON THE IMPLEMENTATION OF THE NATIONAL PROVIDER IDENTIFIER (NPI).

The NPI is now set to go into effect on May 23, 2007 for all but small health plans, who have until May 23, 2008 to implement the NPI. The NPI affects providers, payors, and clearinghouses as defined in the Health Insurance Portability and Accountability Act of 1996 (HIPAA). The section of HIPAA entitled Administrative Simplification first addressed standardization of Transactions and Code Sets (TCS), though the implementation deadline came and went without enforcement; while enforcement of standardized TCS will eventually occur, it is not clear at this time when that will be. The next issues to be addressed were Privacy, and then Security. The final major aspect of Administrative Simplification is the NPI.

The NPI will replace all other forms of provider identifiers such as the Medicare UPIN, Blue Cross and Blue Shield Numbers, Health Plan Provider Numbers, CHAMPUS/TriCare Numbers, Medicaid Numbers, and so forth.

The only provider numbers that are not affected are the Taxpayer Identifying Number (TIN) and the Drug Enforcement Agency (DEA) number for providers who prescribe or administer prescription drugs. The employer Identification Number (EIN) is not affected either, to the extent that a provider is also an employer.

Covered health care providers must obtain an NPI for any subpart of the covered entity that would be a covered health care provider if it were a separate legal entity. Additionally, a covered health care provider may obtain an NPI for any other subpart that qualifies for the assignment of an NPI. This situation may arise in the context of an institutional health care provider; for instance a hospital, that has subparts which require a unique NPI to conduct transactions on their own behalf, such as billing Medicare separately from the hospital.

THE NPI WILL BE UNIQUE TO THE PROVIDER AND WILL BE NEVER ENDING; IN OTHER WORDS, THE SAME NPI WILL BE USED REGARDLESS OF WHEN OR WHERE THAT PROVIDER CONDUCTS STANDARD TRANSACTIONS SUCH AS THIRD PARTY BILLING.

Based on the rule as it is written, it appears likely that there will also be no relation between a provider's NPI and where or how they practice. For example, if a physician practices part time with a group that has its own NPI, and then practices independently part of the time and has her or his own NPI, there will be no relationship between the two issued NPIs even though the same provider bills under both at different times. The same is likely to hold true for institutions and their "subparts" that receive their own NPIs.

The NPI will be unique to the provider and will be never ending; in other words, the same NPI will be used regardless of when or where that provider conducts standard transactions such as third party billing. If or when that provider stops conducting transactions (e.g., retires, dies or goes out of business), the NPI will be deactivated and will not be reassigned to any other provider.

The NPI is a 10 digit number, with the 10th digit being a checksum. There is no imbedded intelligence in the NPI. In other words, nothing in the 10 digits will provide any additional information about the provider other than identifying who or what the provider is. For organizations that depend on imbedded intelligence, this will pose a major problem as will be discussed later in this paper.

The Center for Medicare and Medicaid Services (CMS) will be responsible for issuing the NPIs. This will be done through the National Provider System (NPS), which in turn will contract with an outside agency or organization to conduct the activities necessary to support the use of the NPIs. The specific activities of the NPS are to:

"(a) Assign a single, unique NPI to a health care provider, provided that—

(1) The NPS may assign an NPI to a subpart of a health care provider in accordance with paragraph (g); and

(2) The Secretary has sufficient information to permit the assignment to be made.

(b) Collect and maintain information about each health care provider that has been assigned an NPI and perform tasks necessary to update that information.

(c) If appropriate, deactivate an NPI upon receipt of appropriate information concerning the dissolution of the health care provider that is an organization, the death of the health care provider who is an individual, or other circumstances justifying deactivation.

(d) If appropriate, reactivate a deactivated NPI upon receipt of appropriate information.

(e) Not assign a deactivated NPI to any other health care provider.

(f) Disseminate NPS information upon approved requests.

(g) Assign an NPI to a subpart of a health care provider on request if the identifying data for the subpart are unique."[1]

[1] *45 CFR Subchapter C Part 162 Subpart D 162.408.*

The specifics of exactly who will administer the system and how the NPIs will actually be issued are not known since CMS has not yet issued guidance on such specifics. In addition, based on (a) (2) in the above paragraph, questions have been raised as to whether or not the NPS will perform any type of professional credentialing to ensure that the provider receiving the NPI is indeed a bona fide provider; if the NPS does perform such an activity, hospitals and health plans will need to modify their own credentialing procedures and policies.

NPIs will first be issued to providers who bill Medicare and Medicaid, then to providers who bill commercial health plans only, then to any other providers that conduct covered transactions not mentioned above. Providers who are not covered entities under HIPAA may also apply for a NPI, but they do not take precedence over the issuance of NPIs to covered entities. Business associates who conduct standard transactions on behalf of the provider must use the provider's NPI on those transactions.

Health plans and clearinghouses must use the NPI and only the NPI for covered transactions. A health plan may not require a provider who has already received an NPI to obtain another one, nor can a health plan force a provider to use an identifier other than the NPI for covered transactions.

The Implications of the NPI

Providers

For some providers, there will be little impact other than changing their identifiers on transactions, correspondence, and so forth. For most providers though, there will be a somewhat greater level of impact.

Physicians, Medical Groups and Other Professionals.

For most physicians, the primary benefit of using the NPI will be the elimination of scads of identifiers used by all the payor organizations, public and private. Instead of having to use correctly an identifier issued by a payor, and frequently the same payor has issued multiple identifiers if the physician participates in multiple types of plans offered by that payor (e.g., the payor's HMO, PPO, POS and/or CDH plans[2]), the physician now can and in fact must use the same NPI number for any and all transactions. This should at least theoretically ease a small level of administrative burden, but more importantly it will reduce the rate of errors that were based on the use of an incorrect identifier.

An uncertainty that awaits clarification from CMS is how to address physicians who are eligible to be covered entities in their own right, and medical groups who can also be considered covered entities. For example, a physician may practice with a large group as an employee, and the group conducts covered transactions (e.g., billing) under a single NPI. That physician also has a side practice in which she or he bills under their own NPI. It is likely that the scenario just described will work as described, but until CMS provides concrete guidance in this manner, there is the possibility that each and every physician in the group would need to use their own unique NPI as well as the medical group having one. Under the assumption that the two different NPIs are used in different practice settings, it is certain that the medical group's NPI and the individual physician's NPI will have no relationship to each other via the NPS.

Physicians will no longer be able to be treated as completely separate providers when practicing in different locations (except under the medical group scenario described in the above paragraph). Currently for example, a physician who practices three days per week in Virginia and two days per week in Maryland will likely have different provider identifiers for each location, and there is no easy ability for an outside agency to put information from both practices into a single profile (to the extent that an agency or organization has the right and/or ability to create a physician profile). That physician will now have to use their unique NPI for all covered transactions from any location. Likewise, when a physician moves from one state to another, it will be relatively easy for regulatory agencies, government programs (e.g., Medicare and Medicaid) and health plans to be able to track information regarding that physician's transactions.

[2] *Health Maintenance Organization, Preferred Provider Organization, Point of service Plan, and Consumer Directed Health Plan.*

WHAT IS IMPORTANT FOR HOSPITALS AND OTHER INSTITUTIONAL PROVIDERS IS TO DETERMINE UNDER WHAT CIRCUMSTANCES THEY SHOULD OBTAIN SEPARATE NPIS FOR "SUBPARTS."

Hospitals and Institutional Providers

The benefits of the elimination of multiple identifiers will be similar to those found for physicians, but considerably less so. Since most hospitals have the myriad of required identifiers already in their information systems, there will actually be a small increase in administrative effort simply to change them all to the appropriate NPI. If the hospital has hard coded their provider identifier(s) in their systems (e.g., hard coded their Medicare Identifier and their Blue Cross Identifier), they will need to reprogram that part of the code.

What is important for hospitals and other institutional providers is to determine under what circumstances they should obtain separate NPIs for "subparts." "Subparts" is defined in a limited manner in the codified version of the NPI rule; namely, 45 CFR §162.410(a)(1). The statute only defines a subpart that must receive its own NPI as one "that would be a covered health care provider if it were a separate legal entity." Since subparts are not defined yet by CMS other than to describe them as needing to conduct covered transactions separately from the institution, there is likely to be some confusion around this issue, at least initially. CMS will likely issue guidance to hospitals to help them make that determination. When the hospital does obtain separate NPIs for subparts, then their systems will need to differentiate when to use the subpart NPI and when the services are more appropriately included in the main NPI. This is not terribly different from practices that exist today, so conversion should not be an overwhelming problem.

Health Plans, Clearinghouses and Other Payor Organizations

While clearinghouses may be able to adapt to transmitting the NPI with only modest changes in their systems (unless they have data field problems as described below), the biggest impact of the NPI will fall on health plans. Some health plans using older systems have fixed field lengths for their provider identifiers, and may not be able to accommodate easily the use of a 10 digit identifier. If the plan is using an alphanumeric field to capture the identifier, that could raise an issue. There are even a few plans that have provider identifiers hard coded into their systems. While there are certainly

a number of health plans that currently do not use imbedded intelligence in their identifiers, there are a large number that do. In addition to how the identifier is used for internal operations, the health plan will also need to develop methods for keeping their provider database current by accessing an external agency. Lastly, the problem of legacy provider databases will present no small challenge to most health plans. Each of these issues is briefly discussed below.

Fixed Field Length Code for the Identifier

Health plans that use a fixed field length for the provider identifier will need to either renovate their code, or will need to modify the NPI as it comes into the system and as it exits the system. This last approach, which can be done by using "wrap around" programs, applies only to those organizations that use a fixed field length that exceeds the 10 digit requirement. In that case, a "wrap around" program can capture the NPI as it comes in, add the required number of data (e.g., using zeros or some other meaningless filler) and then forward it on to the main system for processing. As the data comes back out, the extra data are stripped from the identifier, thus recreating the original NPI.

Health plans using fixed field lengths that are too small to accommodate 10 digits are in a much more serious condition. In that case, there is little that can be done other than renovating the code to expand the field length. There are some automated approaches to this as well as the use of off-shore manual programmers to change the code. In organizations with many millions of lines of spaghetti code, this will be quite the undertaking.

Alphanumeric Field Type for the Identifier

A discrete issue can arise of the health plan has been using an alphanumeric field type for the provider identifier. While that field type can certainly be used to store a 10 digit NPI, one must recall that the 10th digit is a checksum. That means that the processing application would be required to do a data type validation before storing the ID in the database. Other provider applications such as credentialing, Claims EDI engines, web portals and so forth would also need to incorporate the logic for checksum validation at the point of entry

A POTENTIALLY VERY SERIOUS PROBLEM IS WHEN A HEALTH PLAN DEPENDS ON IMBEDDED INTELLIGENCE IN THE IDENTIFIER.

Hard Coding of the Identifier in the System

Though most systems these days use tables to store changeable data such as identifiers, there may be some legacy systems in older and larger health plans that have hard coded some provider identifiers in the system itself. If a health plan has historically conducted large volumes of business with certain providers such as a large teaching hospital or faculty practice plan, it may have simply inserted the provider identifier into the code so as to speed up the transaction time. While this is not a common occurrence, it is a potential issue if the code for a legacy system was written many years ago when hard coding was the way most changes were made. In such systems, the provider identifier may not only be hard coded into the transaction software, but may be hard coded into various types of subsystems such as reporting programs, accounts payable programs, financial reconciliation programs and the like.

Imbedded Intelligence in the Identifier

A potentially very serious problem is when a health plan depends on imbedded intelligence in the identifier. In this case, there are digits, or letters (not allowed in the NPI, which can only use digits), that are used by the health plan's systems to enable processing. For example, the letters "PPO2" may be present in the identifier to indicate that the provider accepts the fee schedule for the health plan's second PPO design; or the letters "VA1" may indicate that the provider is to be reimbursed based off of the first fee schedule in place in Virginia. Common uses for imbedded intelligence in provider identifiers include reimbursement tables that the provider has agreed to accept, provider specialty, geographic location (including different locations for the same provider), contracting status with various types of offered health plans, relationship to other providers (e.g., linking a medical group to a facility or an IPA) and location in the directory.

In health plans that use imbedded intelligence to affect the ability of a provider to authorize services (e.g., in a gatekeeper-style HMO), there may be similar logic issues, though to what extent any HMOs use imbedded intelligence to logically link to authorization systems is unknown and may not be a serious problem. That being said, it is still worth it for an HMO to at least ask the question.

In other words, there are many common uses of imbedded intelligence in provider identifiers in place today. And in cases where a health plan uses imbedded intelligence, it is common for the same provider to have more than one identifier from that health plan, depending on how many different programs, locations or reimbursement plans the provider has agreed to participate in.

The common underlying factor is that the identifier itself drives the logic of the system. It is a key element in automating how the provider will be reimbursed for services under a variety of different conditions. With the elimination of imbedded intelligence from the identifier, the health plan must find other means to drive that logic.

There are certainly many ways that a health plan can do this. For example, the logic can be driven off of data within both the member file and the provider file, so the system looks to see what benefit the member has, then checks to see what the status of the provider is (e.g., does the provider participate in the member's PPO or HMO, or does the provider accept assignment of payment at all), and then

process based on those determinations. This is certainly a more cumbersome approach than using imbedded intelligence, but it would be functional. There are likely other approaches, but fundamentally speaking, the logic in the system needs to know what benefit plan the member has, what the status of the provider is as regards that plan, and what reimbursement table to use to pay the provider (and possibly under what conditions).

Another approach is to map the NPI to existing provider identifiers that are already in use. This is a temporary solution at best, and fraught with potential mischief. If the plan is using identifiers with imbedded intelligence and issues more than one identifier to any given provider, then the problem of mapping one-to-many is very great. Mapping to the wrong identifier will result in an error, and error resolution is an expensive activity.

More subtle are changes necessary when a provider has negotiated bundled or packaged pricing for services. This not only brings in the problem of a health plan or provider not being allowed to use non-standard procedure coding under HIPAA (i.e., HIPAA does not allow the use of a non-standard code to indicate that this is a package priced bundle of services), but now the health plan cannot use the identifier to differentiate when the provider is providing services under package pricing from when the services are a lá carte. For example, using imbedded intelligence, a health plan could issue one identifier to a hospital for package pricing for cardiac surgery for HMO members, while issuing another identifier for use when the hospital bills for the services as individual charges for a PPO or indemnity plan. That will no longer be possible unless CMS allows a packed price service to be considered a "subpart" which does not appear likely at this time.

Therefore, in the case of providers and health plans that used the identifier for package pricing, the health plan will again need to match up the type of benefit plan the member has with the participatory status of the provider, but now will also have to be able to identify which billed charges can be stripped out and under what circumstances.

Keeping the Database Current

The next major issue to be addressed is the new need for the health plan to keep its provider database current. The very existence of an agency under the NPS to centralize the issuance and maintenance of the NPI in itself creates some level of obligation on the part of the health plan (and hospital, though to a far lesser degree) to access that data on a reasonably timely basis.

In the case of providers within the service area of the plan or for contracted providers, it is reasonable to believe that verifying the accuracy and currency of an individual provider's NPI needs to be done initially and then only periodically (e.g., every two years, similar to recredentialing requirements under NCQA[3]). For non-contracted providers however, the health plan will need to develop policies and procedures for accessing a centralized data base on a routine bases to verify that the NPI on a submitted transaction is indeed valid and matches the demographic information of the provider. For example, if a previously unknown provider submits a claim from Montana and the central NPI database indicates that the provider practices in New Jersey,

[3] *National Committee for Quality Assurance.*

the plan will need to investigate to prevent fraudulent billing. At this time it is unknown how the NPS will keep its data current and available to health plans and clearinghouses (and hospitals) for purposes of verification. Lastly, as noted in the introduction to this paper, if the NPS undertakes any type of credentialing activity around the issuance of the NPI, the health plan will need to modify its own credentialing policies and procedures to accommodate that.

The Legacy Provider Database

The last potentially ugly issue is the need to consolidate, convert and reconcile provider databases. Most large health plans have more than one provider database. It is quite common for these databases not to match each other, to contain duplicate entries, and to contain inconsistent data for the same provider from one database to another. For example, if a provider did not appear to be in the system, a claims adjudicator may have simply made up an identifier in order to process the claim, even if the provider was indeed in the system but under a different name. More commonly, the systems administering different types of benefits plans (e.g., HMO, PPO, POS or CDH) are separate from each other, do not use common field definitions or data elements, and are rarely if ever compared to each other.

While it may be tempting for some health plans to simply quarantine the legacy provider database as of a certain date, using a new database thereafter, this is only reasonable for health plans in which the provider databases resemble Chernobyl. In all other cases, the coming of the NPI will provide the health plan with a highly valuable opportunity to move to a single master provider database. In several Capgemini benchmarking studies, the use of a single master provider database (as well as a single master member database) was found to be a "leading practice" and associated with operational efficiencies and high performance[4]. The use of a single master database is associated with substantially reduced error rates in payments and an associated drop in the cost of rework. Regardless of how a health plan deals with the movement to the NPI in its provider database(s), the health plan will still need to bridge the NPI with the other provider identifiers for purposes of tracking claims history, 1099 form issuances, reporting, provider profiling and other types of compliance reporting.

It is no easy task to move to a single database, however. In the end it usually comes down to initially using automation to match records and create the new record, but if the health plan has any of the attributes described earlier, there will be a very large number of records that need to be reconciled manually. Manual reconciliation may be a simple matter of recognizing that in one record a physician used an initial for the first name and in another record used a full name, or the same provider has multiple billing addresses, or some other simple reason for a mismatch. But there will be plenty of records that are not so easily reconciled; for example, a physician may bill under his or her name for some services, but under a professional corporation for other services and the connection may not be apparent (and in some cases, the provider does not want such a link to be made!). Lastly, reconciling provider records will also need to accommodate those situations in which an institution has "subparts" with unique identifiers, or a professional bills under a group's NPI.

[4] *Managed Care Measures: Results of the 2002 Managed Care Benchmarking Study, Capgemini, 2003; and Managed Care Measures: Results of the 1999 Managed Care Benchmarking study, Capgemini, 2000.*

Conclusion

One of the least recognized aspects of HIPAA, the creation of the NPI, has the potential to cause health plans in particular to face substantial changes in the way they automate processes. Given the approaching deadline for implementation, health plans need to assess their need to make changes in their systems and provider databases sooner rather than later, though certain activities such as validating the database, as well as validating the NPI for providers not already in the health plan's systems, must wait until CMS issues rules or guidance for those activities. Other activities such as changing the logic in the health plan's various systems to move away from the use of imbedded intelligence is something that must take on a high priority in the near term.

In the end, the administrative burden on providers is likely to be reduced, though it will also make it more difficult for any single provider to appear to be multiple providers under different circumstances. Tracking provider transactions and information between different payors and across geographic boundaries will also become easier. Obtaining an NPI is likely to be a very straightforward process, though the details must await issuance of guidance by the NPS. There will even eventually be a benefit to health plans as they are better able to aggregate data regarding provider performance through the use of the single NPI, but for some plans, there will be a lot of work to get there.

About Capgemini Health

The Industry Leader

Capgemini Health is the global leader in professional services to the health industry, delivering broad-based and results-driven solutions for today's business challenges. We are the only company with the diversity and dedicated experience and resources to address all sectors of the health industry, including hospitals and health systems, academic health centers, post acute care facilities, physician groups, managed care organizations, life sciences organizations, and health-related technology companies. Our professionals include clinicians and former industry executives, who collectively bring hundreds of years of healthcare experience to clients.

Industry analysts confirm Capgemini's leadership position in healthcare consulting, and our ability to capture "mindshare" of healthcare organizations. Gartner, Inc. recently named Capgemini the #1 Top Consultant and System Integrator, and the #1 top Outsourcer worldwide in the health provider market. Kennedy Information, Inc. ranked Capgemini #1 in the provider, payer and life sciences categories in a recent report entitled "The Global Healthcare Consulting Marketplace."

Capgemini's Collaborative Approach: It's What Makes Us Different

Our clients tell us that what makes Capgemini different is the unique, collaborative way in which we help them take advantage of opportunities and solve their problems. Collaboration has long been a recognized cornerstone of our approach to business and is part of our DNA.

Capgemini's "Collaborative Business Experience" represents our commitment to our clients' success and focuses on how we work together. Backed by over three decades of industry and service experience, we make our clients stronger by combining what they do best with what we do best to improve performance. The Collaborative Business Experience is designed to help organizations achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners, collaboration-focused methods and tools, and by making a shared commitment in a bilateral agreement. We have pioneered collaborative practices such as our Accelerated Solutions Environment (ASE), which helps companies create rich strategic and technology solutions in record time.

Working with Capgemini is an experience that's different from working with any other consulting firm in the market. The Capgemini Collaborative Business Experience is more than a philosophy; it represents a measurable promise to our clients. From our very first meeting together, we start demonstrating the value we bring to your organization. With every meeting, phone call, e-mail or other contact and touchpoint with your company, our goal is to enrich and to add more value -- a new idea, a tool, a piece of information or other insight that you might not have had before. We build relationships so we can start delivering the right results from the start… the ones that help bring your company further, faster.

We don't just serve health organizations. We come from and represent the health industry.

Capgemini is uniquely positioned to collaborate with health organizations, and we commit the following capabilities to solving our clients' problems:

- **Top talent and unparalleled experience.** We have a team of 1600 people dedicated to the health industry worldwide. Our proven solutions are delivered by executives with real-world experience running health companies. Our staff includes former CEOs, CFOs, CIOs, and COOs of hospitals and managed care organizations, as well as former executives from research-based life sciences companies, and former government decision-makers. We have more clinicians on staff than any other consultancy — including physicians, nurses, coding specialists, laboratory and radiology technicians, pharmacists, and dieticians.

- **Knowledge transfer and proven solutions.** Through organization-wide cost, revenue and system performance initiatives, we've achieved financial improvements ranging 5-15% for some of the largest health organizations in the country. We have a portfolio of proprietary tools to deliver proven results and speed cycle times, including advanced facilitation techniques, demonstration centers and development laboratories.

- **Unbiased technology orientation.** We have a network of world-leading technology partners, including Eclipsys, IDX, Trizetto, Microsoft, Oracle, PeopleSoft, Cerner, EPIC, and Siemens. Our IT professionals have expertise in all of the major packaged systems used by the health industry. We have full resources in place to run an IT organization, and the depth and breadth to advise, consult or outsource.

- **Thought leadership and involvement in the industry**. Capgemini has a longstanding tradition of investing a portion of our yearly profits into Research and Development work — a commitment that helps us bring deep market insights and innovative solutions to our clients. We literally wrote the book on collaboration in the health industry, entitled *Enabling Collaboration Between Payers and Providers.* In the managed care arena, our professionals authored a leading text on the industry, *The Managed Care Handbook*. In the provider market, we recently published *Innovating Clinical Care through Technology*, the first comprehensive book regarding clinical information systems. In addition, Capgemini's professionals hold a leadership role in the health industry, including chairing HIPAA-related committees; testifying before the National Council on Vital and Health Statistics; and actively participating in a variety of industry professional associations including: AAHP, AHA, ACHE, AONE, HFMA, HIMSS, CHIME, HRDI and NCPDP.

- **A focus on value and results.** We help our clients use a variety of tools that give a full picture of potential opportunities, assigning value not just to production or financial capabilities but also to the benefit of intangibles, such as improving patient safety, service quality, technical capabilities, market share, professional resources, clinical expertise, operational productivity and reputation — all in a manner that ultimately maximizes ROI and profitability.

- **A wide range of health-specific solutions.** We address the full scope of operational and technology issues, including:
  - Business Strategy and Transformation,
  - Clinical Transformation,
  - Revenue Cycle Management
  - Supply Chain Management,
  - Health ERP Packages
  - Outsourcing Services, and
  - Payor Services

Business Strategy and Transformation Services

Capgemini understands that the foundation of any improved business strategy is securing financial and operational strength. We help health-care organizations develop that strength by optimizing business processes, enabling technology, and empowering people. Our proven methodologies are focused on enhancing revenue, improving operational efficiency, and managing capital.

We help our clients achieve and sustain organizational excellence. Through organization-wide cost, revenue, and system-performance initiatives, we have achieved as much as a 3-4:1 return on investment for some of the largest health systems in the country. Some primary offerings within this solution include:

- Capacity Management to achieve measurable improvements in patient flow and quality of care, and optimize the deployment of resources for changing demand and workload.

- Physician Services to streamline ambulatory operations, align physician productivity and compensation, and more closely match physician support levels to organizational goals.

- Growth and Portfolio Management to prioritize service lines and align organizational goals with effort and investment levels.

- Focused Departmental Reviews to improve productivity and efficiency in clinical areas such as patient care, perioperative services, emergency department, and ancillaries (lab, radiology).

Clinical Transformation Services

Clinical transformation is critical for all health organizations that want to improve the quality of patient care and realize full value from their clinical information systems. Many factors are coalescing to motivate health organizations to change the way they use their clinical information systems, in addition to implementing and updating their technology. These factors include external and internal pressures to reduce medication errors, expedite physicians' access to critical medical records, improve patient services and achieve better financial results.

Capgemini's Clinical Transformation consultants help health organizations improve the quality of their patient care, service and financial returns by optimizing their clinical operations. Clinical Transformation optimizes clinical operations *and* the patient's experience using information technology to drive significant quality and financial improvements. It focuses first and foremost on transforming and integrating the processes surrounding an organization's use of its clinical information systems in order to achieve maximum value from the enabling technology. Achieving physician buy-in and adopting organizational change are crucial to successful clinical transformation. System selection and implementation alone are not enough to achieve desired results. Some specific offerings within this area include:

- Front-end assessment and readiness evaluations
- Clinical process transformation
- Accelerated implementation
- Physician-driven design
- Vendor-specific automated methodologies

Supply Chain Services

All health care organizations are under pressure to reduce their supply costs, manage their inventories, and distribute medical supplies smoothly and efficiently. A health provider's supply chain typically represents an estimated 25% — 30% of total operating expenses, with almost 28% of those expenses dedicated to administration, overhead, and logistics.

Capgemini's consultants can help health organizations re-balance and streamline their supply chains. This entails analyzing and changing many of the processes by which the supply chain is managed, including everything from cataloging and tracking inventory to vendor preference. It also requires the implementation of appropriate technology to sustain continued savings.

Capgemini's consultants also help health companies negotiate with group purchasing organizations for better, concentrated pricing. We assist in identifying the best product choices and vendors. Streamlining the supply chain ultimately speeds clinical evaluation, improves the quality of care, and produces substantial cost reductions quickly.

Revenue Cycle Management Services

Inadequate revenue cycle management can cost a hospital 2% - 5% of its gross yearly revenues. Health systems are finding that traditional efforts to reduce expenses often do not work in sustaining financial margins. Cost cutting can only take an institution so far, which is why organizations must find new ways to strengthen the revenue side of the equation.

One of the most promising solutions is revenue transformation, targeted at making sure the hospital collects all that it is owed on a more timely and consistent basis. Capgemini's revenue cycle management services help hospitals collect all that they are rightly owed for services provided. The firm's approach focuses on analyzing and improving the processes that impact revenue management, as well as implementing information technology to maximize financial results. Effective, comprehensive transformation involves every step in the revenue process – from the moment a patient enters the system to final revenue collection.

Health Packages and ERP Services

Traditionally an under-investor in information systems, the health industry is now looking to technology to improve customer service, cost effectiveness, and automation of workflow. Market demands are forcing health care organizations to undertake large, complex information technology initiatives with scarce financial and staffing resources, insufficient project management skills, and limited deep application knowledge.

Capgemini helps health care organizations plan, design, deliver, evaluate, and manage their information systems infrastructure. We thrive on complexity and offer scalability and depth. Our truly integrated solutions focus on both process and technology. We have an implementation track record across the entire industry with predictable, sustainable results. We leverage leading practice databases, vendor package-specific toolsets, and RapidDesign methodologies to bring our clients innovative solutions and accelerated value.

We assist health care organizations by defining achievable project scopes, providing independent vendor management, controlling vendor and project cost overruns, and delivering experienced, knowledgeable resources. Specific offerings within this area include:

- SISP/Architecture and IT Effectiveness Reviews
- Package/Partner Evaluation and Selection
- IT Transformation
- Systems Integration
- Rapid Package Optimization
- Web Services and Portal Development
- Platform Procurement/ Implementation
- Network Architecture, Design and Development

Outsourcing Services

Healthcare organizations have an urgent need to replace their legacy IT systems with newer, integrated technology. The problem is that most health organizations do not have the capital, the ability to recruit/retain skilled and scarce IT personnel, or the experience to quickly build, integrate and manage complex IT systems. Hence, many choose to outsource some or all of their IT.

Responding to this growing market need, Capgemini collaborates with clients to form a long-term strategic IT relationship — one that often includes an assessment of the organization's requirements, a re-design of its operational processes, and the implementation of appropriate information technology solutions. Then under an outsourcing relationship, Capgemini can assume full responsibility for managing the enterprise's new IT system and resources, typically over a period of seven to ten years. The outsourcing contract requires performance at specific service levels to enable the achievement of a greater return-on-investment.

Payor Services

Capgemini is dedicated to helping our clients overcome today's business challenges. Leading managed care organizations (MCOs) — Blue Cross/ Blue Shield plans, commercial health insurers, brokerage companies, payment intermediaries, carve out companies and insurance outsourcers — count on us to help them manage their processes, organizations and technical infrastructure.

We offer a cadre of tools and proprietary benchmarks to address virtually every part of their businesses. We have over 300 executives and other professionals with "hands-on" experience running managed care companies and a keen understanding of key business issues. Some of our key services include:

- Development of portal strategies to improve branding and target high priority audiences
- Development of sales strategy and automation
- Transformation of business processes to improve service levels and reduce costs
- Systems integration, software package implementation, and custom system development
- Redesign of medical management initiatives
- Operational and financial benchmarking

About Capgemini

Capgemini is one of the world's largest providers of Consulting, Technology and Outsourcing services. The company helps businesses implement growth strategies and leverage technology. The organization employs approximately 55,000 people worldwide and reported 2003 global revenues of 5.754 billion euros. More information about individual service lines, offices and research is available at www.capgemini.com.

Capgemini
CONSULTING.TECHNOLOGY.OUTSOURCING

Capgemini Health
Health and Managed Care Consulting

Peter Kongstvedt, M.D.
(571) 382-6250
e-mail: peter.kongstvedt@capgemini.com

John Quinn
(216) 583-1242
e-mail: john.quinn@capgemini.com

Hindy Shaman
(703) 453-6161
e-mail: hindy.shaman@capgemini.com

www.capgemini.com