Testimony of

Simon P. Cohn, MD, MPH

Associate Executive Director, Health Information Policy,
The Permanente Federation, Kaiser Permanente

On behalf of

Kaiser Permanente Medical Care Program
Kaiser Foundation Hospitals, Kaiser Foundation Health Plan, Permanente Medical Groups

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About

Experience Transitioning to ICD-10 and Recommendations

On

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Thank you for the invitation to be here today. I am Dr. Simon Cohn, Associate Executive Director of Health Information Policy with The Permanente Federation of Kaiser Permanente. One of my responsibilities is to serve as Kaiser Permanente's national Medical Group leader on the transition to ICD-10.

In the interest of full disclosure, I was fortunate to serve on this Committee as a member or Chair from 1996 to 2008 and gained first-hand an understanding of the important leadership work this public advisory body performs on health data, privacy, and health information policy for the Secretary of Health and Human Services.

Today I am testifying on behalf of the Kaiser Permanente Medical Care Program. We are the nation's largest health maintenance organization and integrated health care delivery system and provide comprehensive health care services to nearly 9 million members in nine states and the District of Columbia. Kaiser Permanente. We have over 150,000 employees and operate 36 hospitals and over 500 multi-specialty medical offices with diagnostic imaging, laboratory, and pharmacy services. The Permanente Federation represents the more than 15,000 physicians of the Permanente Medical Groups across the country.

You asked us to address two topics today. First, to share our experiences and challenges in the transition to ICD-10[1], and second, to offer recommendations on how the Federal government can facilitate and support a successful transition to ICD-10 in view of the one-year delay that has been proposed.

Before I speak to our experience with the ICD-10 transition, let me provide some background about Kaiser Permanente that will help you understand what the transition means for us.

In a sense, Kaiser Permanente is a microcosm of the larger health care system in the United States. We are a health plan. We have hospitals. And we are a physician organization comprising eight separately incorporated multi-specialty medical groups of varying size. We are in the unique position of experiencing the impacts of ICD-10 from all three perspectives – health plan, hospital, and physician organization.

ICD-10 impacts us in another unique way. We are a national leader in the implementation of electronic health records and have successfully implemented our EHR, which we call KP HealthConnect®, throughout our organization. We have a clinician-friendly terminology solution we developed for use in our KP HealthConnect EHR that must be updated for ICD-10. We call it Convergent Medical Terminology (or CMT) because it is patterned on clinical concepts in several source terminology systems, notably SNOMED CT and the lab-based LOINC system.

[1]The collective term for ICD-10-CM (diagnostic codes) and ICD-10-PCS (procedure codes)

Kaiser Permanente recognized early the need to develop diagnosis terminology that was meaningful to our clinicians and provides access to a much wider range of clinically-relevant diagnoses than are available in administrative code sets like ICD-9.

In CMT, each diagnosis term is mapped in KP HealthConnect® to the appropriate industry standard code or codes. This approach allows us to address clinical needs and still capture the relevant industry standard codes for use in data analysis and billing.

CMT has a deep level of disease and injury specificity. At the time we began preparations for ICD-10, CMT had twice the number of diagnosis terms as ICD-9 had codes.

Let me cite an example to illustrate this greater specificity. CMT includes diagnosis options for a common childhood growth-plate fracture called Salter Harris with terms to capture different severity levels in various bones. This level of specificity in CMT was requested by our orthopedists and was not available in ICD-9. For years, the detailed Salter Harris diagnosis terms were all mapped to the more generic codes in ICD-9. ICD-10 has caught up with these important clinical concepts and includes codes for these Salter Harris fractures. As we update CMT for ICD-10, our Salter Harris diagnosis terms are being mapped to the appropriate Salter Harris codes in ICD-10.

Kaiser Permanente developed CMT as a strategic investment in our commitment to improve the quality of care. In 2010, because of this commitment, we made CMT publically available, donating it to the International Healthcare Terminology Standards Development Organisation (IHTSDO) for U.S. distribution through the National Library of Medicine so that all providers can benefit from this translation-enabling technology. Kaiser Permanente is delivering the CMT files over a two year period, 2011-2013. In this tangible way, we are supporting HHS' goals for adoption of technology to support the meaningful use of EHRs.

It is important to recognize how the use of an EHR changes the process of diagnosis selection and coding in the outpatient setting. Coding is no longer confined to a manual function performed retrospectively by coders but is now in the outpatient setting often determined by selection of the diagnosis term in the course of clinical care.

I have mentioned that our CMT diagnosis terms are mapped to ICD-9 and ICD-10 codes. This is accomplished through a rigorous code assignment process in which at least two certified coders review and assign ICD-9 and ICD-10 codes to each clinical term. The code mappings are then entered into KP HealthConnect. The system has a diagnosis master file which contains a clinical file and billing file with fields for both the ICD-9 and ICD-10 code sets to enable the mapping process.

Going forward, a high quality Federally-supported mapping between SNOMED and ICD-10 would be extremely valuable to Kaiser Permanente and other organizations.

As our clinicians document progress notes and select diagnoses in KP HealthConnect, the system automatically captures the appropriate code underlying each diagnostic term. As a result, coding is more directly linked to the clinician's work. The increasing levels of specificity in codes, particularly encounter-level administrative detail, increases the complexity and time for clinicians to select appropriate diagnoses. This is an important consideration to keep in mind when new codes are being evaluated for inclusion.

Discuss Kaiser Permanente's experience of transitioning to ICD-10

Now I will speak to Kaiser Permanente's experience transitioning to ICD-10. Our readiness can be broadly categorized in four areas: Information Technology Readiness; Convergent Medical Terminology (CMT) and EHR Readiness; People Readiness; and Analytics and Report Readiness. I will address each individually.

Information Technology Readiness

Technology readiness for ICD-10 represents a major operational undertaking and expense for Kaiser Permanente. The effort for ICD-10 is comparable in scale to Y2K. We must make changes in logic and ensure that data fields within affected systems are capable of receiving, processing, storing, and sending the new field size and code characteristics. The level of investment is significant even for an organization of Kaiser Permanente's size.

Nearly 200 information technology applications across Kaiser Permanente are impacted by ICD-10. This includes a broad range of clinical and ancillary systems, disease registries, bio-medical devices, decision support, and the inter-linking applications within KP HealthConnect that include the clinical record, appointments, registration, and billing. Administrative and operational systems and software, such as rate setting, coding audit, contract management, pricing, customer service, data warehouses, claims systems, and others are also impacted.

An added complexity is that one third of our in-scope applications are maintained by third-party software vendors. Kaiser Permanente is dependent on approximately 70 software vendors to supply ICD-10 compliant upgrades before a full internal end-to-end test can begin. In some cases, hardware upgrades are required to accommodate the ICD-10 code structure.

Because Kaiser Permanente is a health care delivery system comprising physicians, hospitals and a health plan, the ability to deliver care without interruption, to bill for services using the new codes, and to adjudicate claims with new codes are very critical areas of work.

Each system must be analyzed and a remediation solution designed, implemented, and tested. Multiple levels of testing are required. Each application must undergo a series of tests including system testing, workflow testing, coordinated vendor testing, and user acceptance testing.

This is followed by the critical integrated end-to-end testing phase. We need to ensure that there is an accurate flow of codes across our own internal systems and to data repositories. As importantly, we need to test the code flow outside our walls, which requires the support and cooperation of our many trading partners. This is an area where the Federal government can play an important role, as addressed in our recommendations.

In 2008, Kaiser Permanente began the technology readiness process, starting with identification of impacted systems. We have continued to validate impacts and identify new IT applications that are affected. We have completed this definition period and are actively in the remediation stage.

Convergent Medical Terminology (CMT) and KP HealthConnect® Electronic Health Record Readiness

CMT is a core component of our comprehensive EHR, and updating the terminology for ICD-10 is a major undertaking for Kaiser Permanente, involving a detailed, time consuming process by a team of CMT physician modelers with input from hundreds of clinicians across Kaiser Permanente.

To decide which CMT diagnosis terms need to be modified, inactivated, or added, the team analyzes the ICD-10 codes, evaluating them against each of the more than 28,000 diagnosis terms currently available.

Let me illustrate why the updating is needed. Concepts that are new in ICD-10, such as laterality and fracture healing type, are routinely captured in clinician documentation but were not a part of CMT diagnosis terms. The additional detail needs to be added to CMT terms to comply with ICD-10 codes, and this requires new terms or changes to existing terms.

With fractures, for example, CMT terms need to specify the displacement type (displaced or non-displaced) as well as the encounter type (initial or subsequent treatment or sequela). Additional detail on fractures is needed in certain cases, such as healing type, fracture type, and

Castillo type. The increased detail in ICD-10 codes, particularly injury codes, has significantly increased the volume of CMT terms and the complexity for the clinician to select the appropriate term.

Another key element of the CMT update process has been reaching consensus on naming conventions. This is particularly important in areas of ICD-10 that have had an explosion of new required detail. These areas include injuries, obstetrical care, and mental health. Consistent naming approaches that are meaningful to clinicians are an essential way of enabling clinicians to search and locate the most appropriate diagnosis in the EHR.

Here's an example that illustrates the complexity involved with the new ICD-10 codes. Take a woman who has Pre-Existing Diabetes Mellitus in Pregnancy. The clinician must indicate whether the Diabetes is Type I, Type II, or Unspecified. If it is Type II, the clinician needs to indicate if the woman is currently using insulin. The clinician also needs to capture the weeks of gestation and trimester at the time of the encounter.

The increased encounter detail in ICD-10 codes is challenging for clinicians. Some EHR vendors including Kaiser Permanente's EHR vendor have developed workflow tools to assist clinicians in selecting diagnoses or identifying an appropriate diagnosis when a previously used term has been inactivated. Determining when and where to use these workflow tools, then configuring them is a significant amount of work.

We need to change the data structure within our EHR to support the new ICD-10 codes. The new structure will also allow us to continue billing with ICD-9 codes for payers like workers' compensation insurers that are not required to transition to ICD-10. A major undertaking and dependency for the transition to ICD-10 is for all eight Kaiser Permanente regions to install, test, and train on new, compliant versions of the EHR.

The modifications to CMT and the EHR to support ICD-10 represent significant configuration and remediation work for our national and regional technical teams that manage KP HealthConnect.

People Readiness

The transition to ICD-10 also impacts people and processes. Kaiser Permanente is completing systematic assessments of all roles within the organization to identify those that will be impacted by changes in codes and/or CMT clinical terms. The three most heavily impacted groups are coders, clinicians, and analytic/reporting staff.

People readiness efforts include a combination of targeted change management communications; changes in policies and job aids; and job-specific education and training. Kaiser Permanente has found "just in time" training to be most effective, so the timing will be driven by the final ICD-10 compliance date.

Coders, particularly Facility Coders who will be using ICD-10 PCS, are the most highly impacted group. They are a valued resource in high demand, and Kaiser Permanente is making a significant investment to retain and re-train them for ICD-10.

We have established a community of practice of coding managers and labor partners to guide the education and training efforts. A baseline knowledge assessment was conducted, and a prerequisite education program is currently underway for all coders, coding auditors, and coding educators. The program is consistent with AHIMA and AAPC guidelines and is designed to increase coder knowledge in key areas of anatomy and physiology, disease processes, and medical terminology that are needed for the new more granular code set.

Formal coder training on ICD-10 will follow the prerequisite training and start 9-12 months in advance of the ICD-10 compliance date.

We are also investigating technology that could facilitate coders' transition to ICD-10 and mitigate reduced productivity. We are considering piloting dual coding functionality that will be available in an updated version of our encoder software later this year. We are also looking at the use of computer assisted coding to support what we call the "hunter/gatherer" tasks of searching for key words across a patient's medical record.

Clinicians, defined as physicians and other providers who diagnose, are the second most impacted group. Preparing them is significant, even though they use CMT diagnosis terms rather than codes.

The level of impact on clinicians varies by specialty and practice location. Clinicians most significantly impacted by the transition to ICD-10 codes are those who treat injuries, manage pregnancies, and care for behavioral health conditions – clinicians who practice in Emergency Departments and Urgent Care, Orthopedists, Podiatrists, Obstetricians, Mental Health providers, and Primary Care practitioners.

Clinician-focused work groups have been established to guide and support clinician readiness efforts. The work groups are addressing "what" clinicians need to do and "how" to do it, and this guidance is closely tied to the configuration work on the EHR. Thus, a compliance- focused work group provides guidance on documentation and coding for ICD-10. An integrated

workflow and terminology work group makes recommendations on CMT terms and how to use workflow tools and search functionality to select the appropriate diagnosis term(s). As par of the readiness effort, we are conducting documentation readiness audits to identify where additional documentation is required to support ICD-10.

Clinician training for ICD-10 will be based on the level of impact and will include some combination of 1) what is ICD-10 – the rationale for the change and expected impact; 2) new workflow tools that support diagnosis selection; 3) new enhanced search functionality; and, 4) specialty specific information that may include new coding concepts and documentation requirements. It is targeted to start 9-12 months prior to the ICD-10 compliance date.

A third key group impacted by the transition to ICD-10 is staff in analytical and reporting roles. Readiness for this group has already begun and includes education on changes in structure of the codes and organization of the code book.

We will complete education and training for all roles prior to the ICD-10 compliance date.

Analytics and Report Readiness

ICD-9 codes are used extensively at Kaiser Permanente for a variety of business purposes, such as identifying patient populations for chronic disease management, defining and tracking populations for clinical research, quality and safety monitoring, external outcomes reporting, clinical and financial decision support, rate setting, defining benefits, utilization management, and claims adjudication rules.

In order to continue these practices without interruption, we need to identify the equivalent codes in ICD-10 and to update the algorithms, queries, tables, and reports where those codes reside. Such “cross walking” between the code sets is a major area of readiness work for ICD-10 and represents a substantial expense for Kaiser Permanente. The General Equivalence Mappings (“GEMs”) from CMS provide a starting point; however, we are performing manual validation to ensure the identified ICD-10 codes meet defined business needs.

An additional complexity we are confronting is the impact of the code set change on longitudinal data. Clinical research is an example of an area impacted by this issue.

Our Position on the One-Year Delay

Those of us who are familiar with previous HIPAA implementations were not surprised by the proposed one year delay. All HIPAA regulations have experienced some type of delay because of the complexity of the health care system in the United States.

Kaiser Permanente submitted comments to the U.S. Department of Health and Human Services (HHS) in support of the proposed one-year delay of the ICD-10-CM and ICD-10-PCS compliance date.

Our size and integrated structure mean that the transitional challenges we face and resources we expend are greater than many other organizations. However, we believe the proposed one-year delay provides the appropriate amount of time to ensure a successful transition across the entire health care spectrum.

We also support the extension of the partial code freeze announced by CMS that sets the first regular update to ICD-10 on October 1, 2015—one year after the October 1, 2014 implementation date. Restricting code updates during the freeze period to only exceptions required for new technology or diseases will provide predictability in general – and for Kaiser Permanente, the assurance of sufficient time to complete our CMT and technology configurations and training.

Our Revised Timeline and Key Milestones with a One Year Delay

Kaiser Permanente began work on ICD-10 four years ago in 2008. Since then, there has been a significant and growing engagement of sponsors and resources. We do not want to lose the gains and momentum achieved. In many areas of the project, we are adhering to original timelines established before a delay was proposed.

Our updates to CMT are targeted for completion in the second quarter of 2013. Information technology remediation is significantly underway for our EHR and other systems. People impact assessments are complete in many areas, and we plan to use the additional time to re-validate the impacts and readiness needs and are adjusting training plans and timelines. Analytics and reporting impact assessments are underway and cross-walk work will continue up to the new compliance date.

For Kaiser Permanente the additional year will give us more time for testing with trading partners and end-to-end testing. It also provides more time to explore automated solutions in

our EHR to support some of the recently introduced code details and to prepare the people of Kaiser Permanente for the change.

The following are key milestones for the final twenty-seven months of readiness, assuming a one-year delay in implementation.

Readiness Area		Start	Finish
Information Technology	In-house Application remediation and testing	Underway	Apr 2013
	Vendor application certification and testing	May 2013	Apr 2014
	KP trading partner testing	Aug 2013	Jun 2014
	End-to-end testing	Oct 2013	Jun 2014
Convergent Medical Terminology	CMT updates for ICD-10	Underway	Jun 2013
People	Organizational awareness	Underway	Sep 2014
	ICD-10 training, all impacted roles	Underway	Sep 2014
Analytics and Reports	Remediation of impacted analytics and reports	Jan 2013	Sep 2014

Strategies and recommended milestones to achieve a successful transition

We recognize that each organization faces its own fiscal and operational challenges in implementing ICD-10. At Kaiser Permanente, our size and structure pose some unique challenges but we also face many of the same challenges experienced by other organizations.

We believe there are several common needs important for maintaining momentum and achieving a successful transition for the nation as a whole. These are areas where HHS can have the greatest impact in facilitating and supporting a successful implementation of ICD-10.

The most critical needs are a clear and unambiguous compliance date and testing across organizations. Integrated testing is the critical milestone. We have also identified other additional areas to promote a successful implementation. We have listed all of our recommendations below.

Before I review our recommendations, I would like to recall a cautionary experience from the 2002-2003 timeframe, when a one year delay in implementation of electronic health care transaction standards was announced. HHS required each organization to submit a compliance plan that included an implementation strategy with budgets, schedules, and work plans for achieving compliance. This approach created massive amounts of work for organizations, resulting in massive amounts of data for HHS. Ultimately, this decision was not judged to be beneficial. We would strongly urge HHS to avoid a similar path for ICD-10 compliance.

We offer the following recommendations for how NCVHS and HHS can facilitate a successful transition to ICD-10:

1. **Announce a final ICD-10 compliance date**

   Observation: Uncertainty about the compliance date is impacting re-planning and resourcing efforts. Impacted organizations are concerned that the implementation date may be moved a second time, as occurred recently with 5010. Announcing a final decision on the compliance date in a timely manner is one of the most important things HHS can to do help assure timely implementation

   Recommendation: HHS should announce the final ICD-10 compliance date as soon as possible.

2. **Sponsor and fund trading partner testing pilots**

   Observation: Adequate and timely testing is the key to a successful transition, as we saw most recently in the implementation of the 5010 standard. Testing across trading partners is the best way to validate readiness of organizations. Several organizations have expressed to us an interest in participating in integrated testing pilots if funding from HHS were available to support it. We recommend such pilots and commit to participate as appropriate.

   Recommendation: HHS should establish and fund external trading partner testing pilots to occur in the range of 10 months prior to the final compliance date.

3. **Work to reduce competing Federal mandates during ICD-10 readiness period**

   Observation: Currently, health plans and provider organizations face multiple HHS initiatives and deadlines that can compete with and ultimately constrain resources that could be dedicated to successful ICD-10 implementation.

   Recommendation: HHS should comprehensively and holistically review upcoming and proposed deadlines that may compete for time and resources with preparations for ICD-10. These deadlines relate to Administrative Simplification, Meaningful Use, HIPAA Privacy and other initiatives. We recommend the Department determine critical priorities and consider extensions or delayed implementation on lower priority initiatives.

4. **Work to ensure additional ICD-10 conversion costs may be included in Medical Loss Ratio calculation**

   Observation: The Medical Loss Ratio (“MLR”) Final Rule defined under the Affordable Care Act recognizes ICD-10 implementation costs as quality improvement activities. The rule

currently limits ICD-10 conversion costs to those incurred in 2012 and 2013. The delay is estimated to add up to 30% in additional costs that will carry into 2014.

Recommendation: HHS should work to modify the MLR Final Rule to allow ICD-10 conversion costs in 2014 to be included in the MLR calculation.

5. **Prioritize and assure appropriate funding for ICD-11 development and testing**

   Observation: Kaiser Permanente recognizes the importance of SNOMED CT and SNOMED-based clinical terminology like CMT. Through integration with SNOMED, ICD-11 has the potential to be a more functional and powerful code set.

   Recommendation: HHS should move to assure appropriately funding for development and testing of ICD-11. We also recommend that the Secretary convene a group of experts to examine the clinical, research, and public policy benefits of ICD-11.

6. **Identify ICD Coordination and Maintenance Committee process improvement opportunities**

   Observation: With ICD-10's greater granularity, the increasing adoption of EHRs, and the expanded role of clinicians in the coding process, the current comment mechanism and timeline followed by the Coordination and Maintenance Committee for ICD-9 may be inadequate for ICD-10.

   Recommendation: We recommend HHS use the opportunity presented by the extended code freeze to re-evaluate the current process, in particular to provide more advance notice and to engage a broader group of clinical stakeholders in the review of proposed changes. We believe NCVHS has a role in assisting HHS in this review.

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I would like to thank the Subcommittee on Standards and the National Committee on Vital and Health Statistics for the opportunity to provide this testimony.