

1                   **Health Information Technology Policy Committee**  
2                                   **Meaningful Use**  
3                                   **June 4, 2010**

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5                                   *Written testimony of*

6  
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11                   **Hearing on: “Using HIT to Eliminate Disparities: A Focus on Solutions”**

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13                   It is my pleasure to once again provide some testimony before this committee.  
14                   As you know the subject of healthcare disparities and HIT are ones that I have  
15                   been focusing on for some time. I like many other believe that HIT offers  
16                   significant promise for healthcare improvement. I also believe there is potential  
17                   for either reduction or increases in one or more healthcare disparities. I hope my  
18                   testimony, in answer to your questions will provide useful guidance as you  
19                   develop certification standards for meaningful use.

20  
21                   **What do you see as the greatest risks posed by the implementation of HIT in**  
22                   **relationship to potentially increasing disparities in health processes and**  
23                   **outcomes?** In my opinion the greatest risk along these lines is that we develop  
24                   the field of HIT in general and meaningful use certification criteria specifically  
25                   using a “one size fits all” perspective. In other words, an under appreciation of  
26                   the potential impact that sociocultural, economic and environmental Human  
27                   Factors issues could have on acceptability and usability and in turn efficacy of  
28                   HIT tools across provider and patient populations, could lead to the  
29                   development and implementation of standards that lead to nonrandom  
30                   differential benefit across populations and therefore increase rather than reduce  
31                   one or more disparities.

32                   Another significant risk that has the potential to exacerbate one or more  
33                   disparities in healthcare utilization or outcomes is the belief that the role of the  
34                   healthcare system within the context of HIT is to focus primarily on providers  
35                   and hospitals/clinics etc. As I mentioned in my previous testimony the simple  
36                   fact that we have about 700,000 Physicians, 2.6 million nurses and 5200 hospitals  
37                   and clinics vs. approximately 365 million consumers conceptually illustrates the  
38                   inherent limitations of that approach. In my opinion getting patients and  
39                   consumers connected should go far beyond connecting consumers to their health

40 information or PCP. It has to be about connecting consumers to whatever  
41 resources they need, (including providers, hospitals), whenever they need them,  
42 to enable them to achieve their health goals. This should not be left to investors  
43 and entrepreneurs without professional healthcare training and expertise. Rather  
44 it should be squarely within the domain of a new “collaborative” healthcare  
45 system. This is the health reform that is most needed and is most likely to lead  
46 us to the innovations that offer the best promise of health improvement for each  
47 health consumer.

48 It is both gratifying and encouraging to know that the Interim Final Rule  
49 for HIT standards, implementation specifications and certification criteria for the  
50 Medicare and Medicaid EHR incentive program appears to have already taken  
51 this into consideration for the proposed Stage 3 implementation (beginning 2015)  
52 when it calls for a “focus on ... “patient access to self management tools”.  
53 Implicit in this proposed rule is the belief that patients will, in the future need  
54 and desire direct access to effective electronic tools that facilitate ongoing  
55 support for the management of their health and health care issues. In addition, it  
56 underscores the need for the development of “meaningful patient use” criteria  
57 that work in tandem with the meaningful provider use standards currently  
58 under development.

59  
60 **What are you, or others with whom you work, doing (or planning to do) to**  
61 **reduce the risk of exacerbating disparities as HIT is implemented across the**  
62 **county?** Much of the work I am currently involved in is designed to 1) increase  
63 awareness of this issue 2) evaluate the potential magnitude and determinants of  
64 this issue 3) develop effective strategies and solutions to address this issue.  
65 Along these lines we have published several books (eHealth Solutions for  
66 Healthcare Disparities), research papers (The role of HIT in reducing disparities  
67 in under resourced settings), federal reports (A Systematic Evidence Review of  
68 the Impact of Consumer Health Informatics - AHRQ) and policy briefs  
69 discussing the evidence and implications of several aspects of these issues.  
70 Collectively, these and other documents form the basis of my testimony being  
71 offered here today. If valuable, I would be happy to provide a list of these  
72 resources to the committee at any time.

73  
74 **What research is being done, or needs to be done, in this area to inform the**  
75 **HIT Policy Committee in trying to establish guidelines that will move**  
76 **providers to implement methods of using HIT to reduce disparities?**  
77 In my opinion, the question should not be what can HIT help providers do to  
78 reduce disparities, but rather “What needs to occur to reduce disparities and is  
79 there a role that provider oriented or consumer oriented HIT can play in making

80 these things happen. In other words, don't think about how to use technology,  
81 think about the issues, processes or activities that need to be enabled, to reduce  
82 disparities. Then look to see if one or more technologies can play a role in  
83 enabling the identified solution. There are also some things we know. In  
84 general, providers have a single patient orientation to practice, yet healthcare  
85 disparities are a group or population phenomenon. As the healthcare system  
86 continues to embrace value based purchasing/reimbursement providers will  
87 increasingly be responsible not just for the patients in front of them, but for all of  
88 the patients they see, collectively. As such, addressing disparities through HIT  
89 will require meaningful use criteria that require that providers regularly asses  
90 their own activities and achievements with regards to specific disparities,  
91 tailored to the patient populations represented in their panels. In a similar  
92 fashion, meaningful patient use criteria could be established and tied to both  
93 provider reimbursements and perhaps also other patient benefits. This would  
94 then begin to align the incentives of the providers and patients in terms of health  
95 outcomes.

96 In terms of specific scientific research, the role of culture in technology  
97 design has its origins in the early 1970's when human factors engineers began  
98 examining the role of culture in the legibility of alphabetic characters, posture,  
99 attitudes towards privacy and the implications of these factors in technology  
100 design. More recently others have shown that cultural factors influence  
101 appropriate mappings between controls and displays, colors and concepts, icons  
102 and concepts. In addition the concept of "Hidden Cultural Assumptions" has  
103 been articulated. This phenomenon is seen in that although HIT designers often  
104 believe that their designs are culturally neutral, the technologies actually embody  
105 cultural assumptions that may not always be appropriate for the intended user.

106 Obviously then, it will be important to gain a better understanding of  
107 provider and patient knowledge, attitudes, beliefs, preferences and current  
108 practices regarding personal HIT utilization. This information should then be  
109 used in the design of future HIT, leading to increased usability, satisfaction,  
110 efficacy and ultimately enhanced outcomes. Because there is a constant evolution  
111 of the technologies as well as personal goals, practices and preferences, this  
112 strategy of assessing providers and consumers and utilizing the information in  
113 the developmental process should be iteratively formalized in the meaningful  
114 use certification/recertification process.

115

116 **With patient and family engagement in care at the forefront of our thinking**  
117 **about improving our Nation's health, what particular strategies would you**  
118 **recommend to us as potential meaningful use requirements in 2013 and 2015**  
119 **for the vulnerable populations we have asked you to address?**

120 As suggested above and written about in my books and research papers, there  
121 are many potential ways. There is no one “electronic silver bullet” HIT, but  
122 rather the goal should be to encourage the widespread adoption of activities,  
123 practices and processes by consumers and providers that address one or more  
124 determinants of healthcare disparities. If 1) incentives are aligned, through  
125 certification or payment for providers and consumers to engage in disparities  
126 reduction activities, 2) if Human Factors and usability considerations across  
127 consumer populations are addressed in the design of HIT for multiple user  
128 populations in order to achieve CCHIT certification and 3) if there is a specific  
129 focus on disparities measures as a healthcare quality metric for providers and  
130 hospitals (and perhaps even patients), 4) as more care is driven out of the hospital  
131 to the home it suggests the need for the development of meaningful use  
132 standards for allied health and support services staff (Community Health  
133 Workers, Patient Navigators, social workers, etc), this will go a long way towards  
134 reducing disparities.

135

136 **How can the meaningful use of HIT specifically reduce a health disparity?**

137 Many examples could be cited. Providers using their EHR data to evaluate and  
138 monitor reductions in specific disparities within their patient panels. Providers  
139 encouraging their patients at highest risk for a given disparity to use a Consumer  
140 Health Informatics tool (Online exercise reminder and BMI calculator) to assist  
141 them with managing the issue in question. The development of tailored & target  
142 HIT, “ target population certified” (disabled, low literate, underserved) or add on  
143 modules for nontailored HIT for provider oriented tools or patient oriented HIT  
144 tools will enhance usability, satisfaction, efficacy and outcomes among disparity  
145 populations.

146

147 **What specific HIT applications have been used to address health literacy**  
148 **(panel 1), culture (panel 2), or access (panel 3)?**

149 There are no specific applications designed to address cultural issues related to  
150 health. Rather, cultural issues related to health and healthcare need to be  
151 understood and incorporated into the design process in the development of HIT  
152 for providers and patients.

153

154 In summary, as my testimony suggests, I believe the best HIT meaningful use disparity  
155 reduction strategy is to develop standards that require 1) informed development of  
156 appropriate HIT tools, 2) requires provider (and patient) use to focus on healthcare  
157 disparities 3) creates mechanisms and opportunities for ambulatory, community based  
158 patient support staff to meaningfully use HIT to improve specific determinants of  
159 healthcare disparities. If the committee takes this course of action, I believe, in the future  
160 that not only will we have made substantial progress toward the goal of reducing

161 healthcare disparities, but also, the work of this committee will be seen as one critical and  
162 visionary piece that helped to get us there.  
163  
164 Thank you.