

Table II. Questions 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, and 17

Question	Yes	No	I don't know	Did not answer
4) Use CMS measures 136, 137, 138*	14	14	3	
5) Use an e-prescribing system	11	21		
6) Use an EMR	14	18		
7) Counsel about sun protection [†]	32	0		
9) Counsel about self skin exams [†]	31	1		
11) Is measure 136 easy to understand	28	2		2
12) Is measure 137 easy to understand	27	3		2
13) Is measure 138 easy to understand	23	7		2
14) Report non-dermatology CMS measures [‡]	2	30		
15) Report measures in a system other than CMS	1	30		1
16) Are measures worth the time to practice	11	5	16	
17) Does CMS provide adequate reimbursement	4	8	20	

Question 1 surveyed the number of patients that respondents saw per week. The average was 109 patients a week.

Question 2 asked for the focus of the dermatology practice, which more than 90.6% said "general dermatology". Other responses included Mohs, pediatric dermatology, cosmetic dermatology, and dermatological pathology.

Question 3 asked for the type of practice (ie, solo, group, academic, etc): 66% were group, 22% solo, and the remaining were academic, managed care, or government practices.

Questions 8 and 10 asked for explanations to the answer to the previous question and are described in the text.

Question 18 asked for general comments and is described in the text.

CMS, Centers for Medicare and Medicaid Services; EMR, electronic medical record.

*One respondent reported using measures 136 and 138, but not 137.

[†]Counsel for high-risk patients.

[‡]Respondents reported tobacco and alcohol measures.

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Mobile teledermatology in Ghana: Sending and answering consults via a mobile platform

To the Editor: "Mobile teledermatology" uses mobile devices to provide dermatologic services at a distance. It has demonstrated high levels of diagnostic concordance when compared with traditional face-to-face (FTF) dermatology clinic-based visits.¹⁻⁵

Ghana, an African country of greater than 20 million inhabitants, has limited access to dermatologic care; however, access to mobile communication has become increasingly readily available. To bridge the gap between the limited supply of dermatologists and the great need for their services, it is important to use the already existing and successful mobile telecommunications infrastructure in Ghana.

This pilot study was developed to evaluate the concordance of diagnoses made by 3 Ghanaian dermatologists examining patients FTF compared with that of a distinct remote Ghanaian teledermatologist exclusively using a mobile platform and a US teledermatologist using a desktop computer. In all, 34 patients with skin symptoms were randomly selected from 1 family medicine and 2 dermatology outpatient clinics in Accra and Kumasi, Ghana. Each patient had an initial FTF visit with 1 of 3 Ghanaian dermatologists who made a diagnosis of a primary skin condition. At this same FTF visit, data and images were collected by a US medical student who was part of the research team using the mobile application ClickDoc [ClickDiagnostics, Cambridge, MA] (used for data

collection and image capture) on a Samsung U900 Soul mobile telephone. This information was then transferred to a World Wide Web–based interface (africa.telederm.org) for subsequent viewing by separate and remote Ghanaian and US teleconsultants. Each of the 2 remote teleconsultants independently rendered diagnoses. The Ghanaian teledermatologist rendered diagnoses based solely on images and data displayed on a separate Samsung U900 Soul mobile telephone (Samsung Electronics, Suwon, South Korea) through on-phone access to the World Wide Web–based interface while the US teledermatologist viewed the images and data on a computer. The results were then tabulated to verify concurrence of diagnosis between the FTF Ghanaian dermatologists and the separate and remote Ghanaian and US teledermatologists.

Diagnostic concordance in skin disease was observed in 27 of 34 (79.4%) and 26 of 33 (78.8%) cases when comparing FTF visits with remote Ghanaian and US teleconsultants, respectively. Ten of 14 (71.4%) nonconcordant cases were in the same differential diagnosis disease category. Eczematous eruptions were the most commonly recorded, accounting for 12 of the 34 cases, followed by acne (4), drug rashes (4), pigmentary alteration (3), tinea versicolor (2), and 9 other single diagnoses (9).

To the authors' knowledge, this is the first study examining the use of a mobile-to-mobile platform to provide dermatologic care in Ghana. Mobile telephones can be successfully used in Ghana to capture images and patient information through the use of a mobile application and viewed via a World Wide Web–based interface through which remote dermatologists can render an appropriate diagnosis by viewing the images either on a mobile device or computer. The concordance rates for the mobile-to-mobile teleconsultation model were similar to that of traditional mobile-to-computer models seen both in this study and other published reports.¹⁻⁵ Limitations of this pilot evaluation include small sample size. Mobile teledermatology is well suited for Ghana because of its wide penetration of mobile technology and the elimination of an interposed broadband Internet connection and costly equipment. Its introduction in Ghana can provide a cost-effective solution to improve the delivery of and access to dermatologic services.

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