Telemedicine MD consultations: satisfaction rates and use patterns among working-age adults

Mercer was retained to analyze data collected in a patient survey by TelaDoc, a national firm offering telemedicine consultations with primary care physicians. The survey asked patients for satisfaction ratings of the service and also asked what conventional care the TelaDoc consultation replaced. Because survey respondents were largely of working age, we focused on responses of that age group. Our findings included the following:

- **Reported satisfaction levels**: Most (80%) employment-age patients selected the highest rating (“outstanding”) for the TelaDoc service overall. This is somewhat lower than the proportions of patients selecting highest ratings (90 - 98%) in academic studies of satisfaction with telephysician services and higher than the proportion (70-78%) of patients selecting the highest ratings satisfaction for face-to-face primary care.

- **Displacement of conventional care**: TelaDoc’s employment-age patients reported that had TelaDoc not been available to them, they would have sought care from the below sources or gone without treatment in the following proportions:
  - Primary care (53%);
  - Urgent care clinic (25%);
  - No treatment (12%);

- **Estimated average charges for displaced conventional care**: The average allowable charges for the above mix of conventional care is estimated by Mercer as $127. Of that total, a self-insured employer plan would typically pay roughly $96 and patients’ cost sharing would be $31.

- **Age group reporting highest-cost, alternative care**: The 51-64 age group used TelaDoc instead of the highest-cost mix of conventional care: an estimated average allowable charge of $146. This age group was also most likely (11%) to report that they would have gone to an emergency room if TelaDoc had not been available.

TelaDoc’s standard charge for a consultation is $35, of which $25 is typically paid by the payer and $10 by the patient. As claims-paid data becomes available to measure actual allowable charges and patterns of utilization after telephysician consultations, their net impact on total costs of care to employers and to employees, including the pro-rate cost of any monthly subscription fees, can be more precisely calculated.
Introduction

Data collected in a patient survey by TelaDoc, a national telephysician consultation service, offered an opportunity to assess the response of employment-age patients to a commercial teledmedicine service. The TelaDoc survey asks patients to rate its services and also to indicate where they would have sought medical care had TelaDoc not been available to them.

Mercer analyzed the TelaDoc survey data to answer three questions:

- What satisfaction ratings did patients give to TelaDoc’s services?
- What alternative sources of medical care did patients report that they would have sought in the absence of the telephysician consultation?
- What ranges of average allowable charges to employer/payers and patients can be estimated for those alternative services?

Rates of patient satisfaction with tele-physician consultations reported in academic studies

Patient satisfaction is one the most widely researched outcomes for telemedicine. A substantial body of research has documented patient satisfaction ratings for telemedicine as generally above norms reported for face-to-face care. A number of academic studies have focused specifically on telemedicine-physician consultations with findings of 90% or more of respondents selecting the highest available ratings of satisfaction. A well-designed study by the Telemedicine Center at the North Carolina School of Medicine, for example, reported that 98% of the 495 patients receiving interactive telemedicine consultations selected the highest levels of satisfaction ratings for their care. In comparison, face-to-face primary care physician visits generally report ranges of 70-78% of respondents selecting highest available satisfaction rating.

The leading reason given in this and in other studies for patients’ high levels of satisfaction with telephysician consultations is its convenience. Correspondingly, patient dissatisfaction with conventional care is frequently attributed to inconveniences in scheduling and getting to appointments.

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2 Ibid.
4 Ibid.
7 Martin J. Sepulveda; Thomas Bodenheimer; Paul Grundy. Primary Care: Can It Solve Employers’ Health Care Dilemma? Health Affairs. 2008; 27(1):151.
The TelaDoc patient population and survey respondents

Mercer analyzed survey data from 643 patients who responded to the survey during the fall of 2007. Most (95%) survey respondents were between 20 and 64 years old. The average age was 44. Survey respondents were disproportionately female and residents of either Texas or California (see figures 1 and 2 below.)

The TelaDoc satisfaction survey was developed, distributed, and collected by TelaDoc.

The survey posed 18 questions concerning ratings of services by its physicians and call center as well as ease of filling prescriptions given by the physician. The survey also asked what medical care, if any, would have been sought had TelaDoc not been available. (The copyrighted TelaDoc survey can be found in the appendix.)

The 643 survey respondents represented only 20% of the total number of patients reported to have TelaDoc consultations during the survey collection period. Mercer was not given descriptors of non-respondents and is, therefore, unable to determine to what extent the respondents were representative of TelaDoc patients overall.8

Rates of satisfaction with TelaDoc Physicians Services

Most (96- 98%) respondents selected the positive “yes” response to specific questions about interactions with the physician.9 (See figure 3 below.)

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8 Most (83%) of survey respondents indicated that they had requested their consultation from the TelaDoc web site rather than by telephone. Findings here may be more representative of internet users who tend to be younger, better educated, and have higher incomes than patients who prefer telephone access to web access.

9 Response options were yes/no/don’t recall.
A lower rating was, however, given to physician services overall: 80% of respondents selected the highest rating, *outstanding*. (See figure 4 below.)

A similar proportion of respondents, 81%, selected an *outstanding* rating for the overall TelaDoc service which includes physician, call center, and prescription drug support. It cannot be determined at this point, whether the lower ratings are due to poorer services or to the higher income and service expectations of populations being served by TelaDoc relative to those served in published research.

**Figure 4. Ratings for Physician Services overall**

- **Outstanding**: 80%
- **Good**: 17%
- **Poor**: 3%

**Alternative care that patients would have sought if TelaDoc were not available**

The TelaDoc survey asked what medical care - if any - would have been used had the TelaDoc service not been available. In analyzing responses to this question, Mercer selected only working-age patients, defined here as ages 15 to 65 years old (N=625 or 97% of the 643 total respondents).

Most (53%) of TelaDoc users within this age bracket indicated that they would have sought a primary care visit. The next largest group (25%) would have visited an urgent care or retail physician. Smaller proportions would have visited an emergency room (8%) or a specialist (2%). The remainder (12%) reported that they would not have sought any medical care. (Figure 5.)

**Figure 5. Alternate Care**

- **No treatment**: 12%
- **Primary care doctor visit**: 53%
- **Specialist visit**: 8%
- **Urgent care/retail clinic**: 25%
- **Emergency room**: 2%

*Respondents’ answers to the question: “If you did not have the TelaDoc service, how would you have resolved your problem?” (N=643)*
TelaDoc charges and Mercer’s estimated cost of displaced conventional care

TelaDoc reports that its total charges per consultation are $35 toward which payers normally contribute $25. In order to compare the TelaDoc per consultation fees to the conventional care that patients would have used had TelaDoc not been available, Mercer assigned national-average, allowable, commercial charges to the four categories of care posed in the survey as alternative face-to-face care. We then calculated a weighted average across 15-to-65 year-old respondents to this question (N=618). The weighted average cost of alternative care reported-- including “no treatment”-- was $127. Assuming standard benefit structures, self-insured employers would pay roughly $97 and employees approximately $30 of the $127 (see appendix B for assigned charges and frequencies). (Figure 6)

Figure 6. Estimated average charges for alternative care to TelaDoc reported by survey respondents (N=618)

The age group with the highest average alternative care choice was the 51–64 year olds. This group would have used alternative care averaging a total of $146, with $112 to the employer and $38 to the employee. The costs of this age group’s alternative care reported the highest rates (11%) of seeking emergency room or urgent care (27%).

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10 Membership fees are a separate cost from the per consultation fees discussed here. TelaDoc reports that its per member/ per month fees for self-insured employers, plans, or third party administrators can range from $0.25 to $1.25. Our comparison of TelaDoc and average commercial fees paid by self-insured employers are for per consultation estimated costs only.

11 Sources for these estimates were Mercer internal data bases reporting average, allowable, commercial charges for health care services to self-insured employers for CY 2007. The TelaDoc survey asked respondents to estimate the costs of the alternative care that they indicated they would have used. This item had, however, a low response rate (N= 325 responding out of the 636 who had selected a displaced service.) The Mercer-generated, assigned average charges were used instead of these responses.

12 The weighted average included the 12% of respondents who reported that they would not have sought any other medical care. Their alternative care was assigned $0.
What happens after Telephysician consultations?

The TelaDoc survey did not ask if patients subsequently sought medical care for the same condition after the consultation. The costs of such care would, of course, offset any savings attributable to the TelaDoc intervention.

The survey did ask if a prescription was given by the TelaDoc physician. A large proportion of patients – 86% of respondents to this question - indicated that they had received a script. A Mercer clinical advisor reviewed a list of all TelaDoc prescriptions during the survey period. The scripts were predominantly antibiotics typically used to treat acute infections or inflammations. Those cases that do not respond to the antibiotic could be expected to seek additional care. Some patients may seek conventional, face-to-face care and physical examination whether or not the condition persists.13

Conclusions:

TelaDoc survey data indicate that most (80 and 81%) patients gave the highest available rating, “outstanding,” to its physician services and to its services overall. The TelaDoc findings are less positive those reported in academic studies of telemedicine.14 Employment-age TelaDoc patients may have higher expectations than the low-income, elderly, and college student patients studied in research demonstration projects for telemedicine. Further, in an ongoing, commercial environment patients may encounter more process problems than in a carefully controlled research setting. TelaDoc patients do give higher ratings—similar to those in academic studies—for interactions with the physician than for the overall TelaDoc package of services, which include interactions with non-physician staff and with the web site.

A majority of TelaDoc patients reported that they used its service instead of seeking primary care (53%), urgent care (25%), no treatment (12%), the ER (8%), or a specialist (2%). Mercer estimates an average allowable charge for their mix of conventional care alternative of $127. TelaDoc clients have not yet analyzed claims data to measure actual follow-up care sought after using its services. As such information becomes available it will be possible to estimate more precisely the net impact on costs of care of commercial telephysician consultations.

13 Neil Smithline, MD, Mercer Sr. Clinical Advisory, reviewed a list prepared by TelaDoc of all scripts prescribes by TelaDoc physicians during the fall of CY 2007.

14 Whitten, op. cit.
Appendices

A. TelaDoc Survey

Below is the copyrighted TelaDoc survey administered during the fall of 2007. TelaDoc, with consultation from Mercer, has since revised the survey to develop a new version that is now in use.

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**TelaDoc Customer Satisfaction Survey**

Let Us Know How to Serve You Better!

Recently, someone in your family used the TelaDoc medical service. We are anxious to know how well our team performed, and we want to learn how to serve you better. We appreciate your membership and service use and are dedicated to providing you and your family quality medical care. Please complete the following questionnaire and tell us about your experience. It only takes a few minutes, and your feedback is very valuable.

In the future you can complete the survey online and receive a $3 credit toward your next consult. You must have a valid current email address on your account to receive the online survey notice. Note: Not applicable if association/employer/third party pays for your consult.

1. How did you request the consult?  
   - TelaDoc Call Center OR TelaDoc Website

2. Did the Call Center Representative answer the phone in a timely manner?  
   - Yes  No  Don’t Recall  N/A

3. Did he/she use a friendly tone of voice?  
   - Yes  No  Don’t Recall  N/A

4. Was the Representative informed and able to answer your questions?  
   - Yes  No  Don’t Recall  N/A

**Tell Us About the TelaDoc Physician**

5. Do you feel the physician listened and understood your problem?  
   - Yes  No  Don’t Recall  N/A

6. Did you feel comfortable asking the physician questions?  
   - Yes  No  Don’t Recall  N/A

7. Was the physician friendly?  
   - Yes  No  Don’t Recall  N/A

8. Was the physician willing/able to help you solve your problem?  
   - Yes  No  Don’t Recall  N/A

9. How would you rate the service provided by the TelaDoc physician?  
   - Outstanding  Good  Poor

**Tell Us About the TelaDoc Prescription Service**

10. If a prescription was prescribed, was it filled in a timely manner?  
    - Yes  No  Don’t Recall  N/A

11. Were there any problems filling the script?  
    - Yes  No  Don’t Recall  N/A

12. If there was a problem filling the script, was it resolved in a timely manner?  
    - Yes  No  Don’t Recall  N/A

**Tell Us About the TelaDoc Service**

13. How would you rate the TelaDoc service overall?  
    - Outstanding  Good  Poor

14. Would you use the TelaDoc service again?  
    - Yes  No  Don’t Recall  N/A

15. Would you refer TelaDoc to a friend or relative?  
    - Yes  No  Don’t Recall  N/A

16. If you did not have the TelaDoc service, how would you have resolved your problem?  
    - Primary care doctor visit  Specialist visit  Urgent care/hospital clinic  Emergency room  No treatment

17. If you had used the treatment option from Question 16, what would your costs have been?  
    - $0-$50  $50-$100  $100-$200  $200-$500  More than $500

18. How can we improve our service?

**Contact Information** (Optional: Please check the appropriate box.)

- Would you like to share your experience with others? Stories are featured on our web site and in our newsletter. If you would like to participate, please let us know. A TelaDoc Customer Support Specialist will contact you soon.

  **Member Name:**
  **Phone Number:**

- If you have an issue or concern you’d like to share with a TelaDoc Customer Service Specialist, please provide your name and contact number below and we will call you promptly.

  **Member Name:**
  **Phone Number:**

- If you would like TelaDoc to forward your employer/group/provider a copy of this survey, please provide the following information.

  **Company/Group Name:**
B. Assigned Average Allowable Charges and Frequency Descriptions for Survey Respondents (TelaDoc sample aged 15-65, n=625)

Q16: If you did not have the TelaDoc service, how would you have resolved your problem?

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Note

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