| School                        | Does your<br>school/hospital<br>system provide<br>medical students<br>with remote access<br>to electronic<br>medical records?  | Are there restrictions on who<br>gets access, where students can<br>access info, what info is shared,<br>etc? | How long have<br>med students<br>at your<br>program had<br>remote access<br>to patient info? | How were students<br>at your program<br>given access? Were<br>there challenges or<br>roadblocks for your<br>student leadership?  | What is the impact of remote access on your medical school experience?   |
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| University of<br>Pennsylvania | Yes, we get access<br>to all of the Citrix<br>applications like Epic,<br>Eclypsis, Centricity,<br>Emtrac, etc. We have<br>to call the help desk<br>to get access to the<br>"extranet" for basic<br>access. If we want<br>VPN access we have<br>to make a special<br>request. VPN makes<br>it a bit easier and<br>allows you to access<br>shared drives at the<br>hospital. The SOM<br>registrar needs to<br>cosign these IT<br>requests. |   | Not sure.  | I had to proactively<br>request remote<br>access for myself<br>and have it signed off<br>by an administrator.<br>They don't<br>necessarily<br>encourage everyone<br>to do it, but it's<br>possible if you ask. | "I certainly enjoy and appreciate the<br>access at home. I can finish my Epic<br>charts at home at 2am, I can look up that<br>lab result I've been waiting for all day and<br>night, and I can read up on my patients for<br>the next morning, etcso I find it highly<br>valuable."  |
| Duke                          | All students<br>associated with<br>clinical services get<br>access. Information<br>can be accessed<br>from any computer<br>with an internet<br>connection and an<br>ability to create a<br>VPN connection.   | Access is identical to<br>access afforded at hospital<br>computer stations - no information<br>is restricted. | For at least the<br>last two years<br>and presumably<br>much longer.                         | It's a given. No<br>challenges or<br>roadblocks to the<br>knowledge of current<br>students. Our Tech<br>guys regulate<br>access.   | "Substantial. Monitor patient's progress<br>from home. Get a sense of changes to the<br>schedule early and read up on patients<br>before arriving at the hospital. Work on<br>H&Ps from home. Also allows me to work<br>remotely - elsewhere in the hospital -<br>should I desire. "   |
| University of<br>Pittsburgh   | Yes. All third- and<br>fourth-year med<br>students are eligible<br>for it after doing some<br>quick paperwork.   | I believe we have access to all the same things as physicians.  | Last year was<br>the first year we<br>had it.  |  | "It's really, really helpful to have. If a note<br>is not time-sensitive and you have to leave<br>the hospital at a certain time, then you can<br>finish the note from home. You can also<br>check in on your patients before you go to<br>bed and therefore will have less to catch<br>up on in the morning. And recently, when<br>I was writing a case-report abstract on a<br>patient I followed during my medicine<br>rotation last March, I could review his<br>records from anywhere rather than having<br>to sit at a clinical work station or print out a<br>few dozen pages." |

| Wake Forest<br>University | Yes.  | Med students get the same remote<br>access as physicians at our hospital<br>(both attendings and residents)<br>through our hospital's web portal.<br>So, we can access our EMR from<br>anywhere with internet access.   | I assume as<br>long as<br>residents and<br>attendings have<br>had remote<br>access, but I am<br>not sure about<br>this. | Med students are<br>treated as residents<br>in this regard, so<br>there wasn't much<br>issue with med<br>students being given<br>access.  | "It's been great. I am able to access<br>patient charts from home, so often times I<br>could find out what happened with my<br>patients the night before while I'm at home<br>drinking coffee. All the med students<br>utilize it in some way. There are little<br>security issues with it as well since we<br>have to go through a portal every time to<br>use it (so if someone's computer gets<br>stolen, the EMR is not available on that<br>computer unless you logon through the<br>web portal). "   |
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| University of<br>Utah     | Yes, we can access<br>EMRs from home at<br>any time. All medical<br>students have<br>access.  | We have access to all information.  | I'm not sure how<br>long we have<br>had access, but<br>it's been a while.   |   | "It's an extremely helpful resource to have!<br>It makes working from home much easier,<br>obviously, as well as complementing<br>learning as charts and information are<br>constantly easily accessible for<br>preparation of presentations."   |
| SUI-SOM                   | All 3rd and 4th year<br>students have<br>access.  | I can access the same information<br>from home that any clinician can.<br>There are no restrictions other than<br>the restrictions that apply to any<br>medical student accessing the<br>system. We cannot access the<br>operating room schedules. The<br>system records the charts that we<br>view and we are occasionally<br>audited. | I'm not sure on<br>this one, for at<br>least the past 1<br>or 2 years.  | We have access by<br>downloading the<br>citrix application to<br>our PCs. I am not<br>aware of any<br>roadblocks that were<br>encountered in<br>granting students<br>remote access.<br>I don't see the<br>problem with letting<br>students have<br>access because we<br>are bound by HIPPA<br>to keep it private no<br>matter where we get<br>it. | I personally have found it to be very<br>beneficial to my experience. I'm able to<br>check the vitals or significant events for<br>my patients before even stepping foot into<br>the hospital. It helps me to prioritize which<br>patient's I should see first, how long I'll<br>need with each patient, and when I need<br>to come in. It also lets me know if my<br>patient was truly discharged, or if<br>something got in the way and they ended<br>up staying after we set up the discharge.<br>However it is nice to be able to check labs<br>you ordered late in the day from home that<br>night. |
| University of<br>Kansas   | All 3rd yr medical<br>students receive<br>remote access via<br>the laptops we were<br>required to buy at the<br>beginning of medical<br>school. We have<br>tech support help us<br>download the<br>appropriate software<br>on the laptops and<br>are given access at<br>3rd yr orientation. | With access we are able to gain<br>complete access to the hospital's<br>EMR and look up patients.   | We have had<br>information for<br>about 3 yrs I<br>think  |   | It is a key component to our 3rd year<br>clerkships. Most students who are on<br>inpatient service use the access at home<br>daily. It allows for students to get the<br>maximum experience, as we are able to<br>read about pts and follow imaging and<br>labs after we leave the hospital. Students<br>are also allowed to follow up on pts with<br>pts' approval  |

| University of<br>Chicago           | Yes. The medical<br>center has given us a<br>login through a Citrix<br>Access Platform that<br>grants access to<br>EPIC as well as the<br>med center's server<br>for remote access to<br>secure hard drives.<br>Citrix is also how<br>students have home<br>access to up-to-date<br>and pubmed. | EPIC contains all labs, links to<br>PACS images, operative reports,<br>path reports, clinic notes, ER notes,<br>and labs. The only information not<br>on EPIC is admission notes which<br>are still paper-based in our<br>institution.   | Since we fully<br>adopted EPIC,<br>which was<br>around 3 years<br>ago.                                      |  |  |
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| Eastern<br>Virginia                | We use Epic Ecare at<br>our primary teaching<br>hospitals. All medical<br>students who have<br>completed the online<br>training course can<br>request and receive<br>access. Typically,<br>only the M3+<br>individuals do the<br>training but in theory,<br>an M1 can do it as<br>well.         | In our outpatient clinics, we use All<br>Scripts and students have read only<br>access. W/ both Epic and<br>All Scripts, we have access to<br>everything in the system. We<br>cannot sign orders; we can only<br>pend them for our<br>interns/residents/attendings<br>although we typically don't because<br>it's complicated to sign pended<br>orders. When we preround, we<br>write our own notes and our<br>intern/resident cosigns it and puts<br>an addendum on it. Our attending<br>then cosigns that note w/ an<br>addendum                           | We've had<br>access as long<br>as it's been<br>around at our<br>hospitals more<br>than 2 years<br>now?      | There weren't any<br>challenges I am<br>aware of. The<br>hospital groups we<br>are partnered w/<br>understand the<br>necessity to have<br>student access the<br>EMR. We complete<br>the same training<br>that the MDs have to<br>undergo to get<br>access. | "Remote access is great! We can monitor<br>our patients from home, see if our pt is still<br>around so we can know whether we need<br>to preround at all, we can see how our day<br>is going to be before we get in, we can<br>even get started on writing the note before<br>we get to the hospital facilitating the speed<br>of prerounding, we can access the EMR<br>through our iPhones and iPads making it<br>easier to round and pick up lab values,<br>reduce the traffic on the number of people<br>using the computers on the wards |
| Loyola                             | Yes.  | addendum.<br>No, just must abide by HIPPA.   | At least 3 years.   |  | "AWESOME!! Reduced rounding time,<br>plus check on pts when at home"   |
| Southern<br>Illinois<br>University |   | Students have limited access to<br>patient charts in the fact that they<br>cannot make any changes or<br>alterations to any info in the chart<br>and do not have access to all<br>documentation. However, they<br>have no restrictions on reviewing<br>vital signs, orders, and medications<br>of each patient. Students can have<br>access from any computer as long<br>as that computer has downloaded<br>the supported software content with<br>the appropriate permission. The<br>med student still needs a username<br>and password to access the info. | Medical<br>students have<br>had remote<br>access since the<br>hospitals went<br>electronic in late<br>2008. | Students did not<br>have any problems<br>getting remote<br>access. Remote<br>access was given as<br>soon as students<br>were allowed hospital<br>access to the<br>computer systems.  | Remote access provides students with a<br>better understanding of how their patients'<br>conditions improve or worsens when they<br>are not physically in the hospital. I am not<br>sure how many students take advantage<br>of the remote access, but it does provide a<br>good understanding of the status of the<br>patient when the student comes to the<br>hospital in the morning.   |
| University of<br>Miami             | Yes our school does<br>have at home access<br>to the EMR for our  | There are no restrictions on who<br>gets access, anyone who has<br>completed the training to access the  | I'm not sure<br>when it started; I<br>think shortly   | The transition has<br>been lead by the<br>hospital department  | Allowing us to check vitals and get labs<br>before we come into the hospital helps us<br>not violate hours restrictions (students  |

| University of<br>Miami, cont. | main hospital. We do<br>not have it at our<br>private hospital or at<br>our VA. Our main<br>(county) hospital is<br>only partially EMR,<br>old notes from<br>previous visits,<br>current labs,<br>diagnostic imaging,<br>and vitals are all<br>available for patients<br>on the floor.<br>However, progress<br>notes and consults<br>for the current<br>admission, orders<br>that have been<br>written but not yet<br>carried out (entered<br>by the secretary), or<br>ANY information for<br>ICU/step-down<br>unit/trauma patients<br>is on paper | computer system while in the<br>hospital can access it at home<br>through a proxy. All of our course<br>material for medical school, any<br>library books or journals online, and<br>the hospital EMR are all accessed<br>via a proxy. Students are<br>fingerprinted and background<br>checked during the admission<br>process. We cannot enter notes or<br>access "sensitive information" such<br>as HIV status for patients. This<br>hasn't been an issue since all of our<br>progress notes are handwritten.<br>Some of the rotations are starting<br>to switch over to computer based<br>notes (Pediatrics) and lets students<br>enter a note which gets a special<br>color designation as a student note<br>and another color designation<br>indicating when it has been<br>reviewed and co-signed by a<br>resident or attending. | after we began<br>EMR you could<br>access it from<br>home (more<br>than 4 years<br>ago). It has<br>been discussed<br>for our private<br>hospital which<br>just began a<br>new method of<br>EMR, but it is<br>policy not to<br>allow anyone<br>(employees or<br>students)<br>access from<br>home for the<br>VA. | and has not required student leadership.   | aren't allowed to come in before 6AM, but<br>rounds start at 6 so it's hard to pre-round<br>unless we get started at home).     |
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| University of<br>Kentucky     | is on paper.<br>Yes. We have to<br>apply for access<br>through IT.   |  |  | Usually, we have to<br>show a need for<br>access. It is much<br>easier to get access<br>for research or<br>services that have<br>home call. We also<br>have rotations at the<br>local VA clinic, which<br>we can't get remote<br>access and beyond<br>the control of the<br>university. If access<br>is granted, they walk<br>you through setting it<br>up on your personal<br>technology. |   |
| Creighton                     | Partial.   | We only have access to our "Lara"<br>system which is patient vitals and<br>labs, but no more.  |  |  |   |
| UVM                           | UVM does provide all<br>students with access<br>to our EMR system,   | The gateways have to be set up on<br>individual computers through a<br>verification process with our   | We've had<br>access since<br>June 2009,  |  | I do appreciate having remote access. On<br>several occasions I was able to base my<br>pre-rounding times on the active census, |

| UVM, cont.               | Prism, from home<br>through the same<br>gateway all<br>physicians access<br>patient records from<br>home.   | information systems team. I'm<br>unaware of any limit to the number<br>of gateways that can be set up per<br>person, but I have a feeling one<br>does exist. The gateways provide<br>access to full files and allow us to<br>write/edit notes from home as well,<br>though this is strongly discouraged. | when Prism was<br>started at<br>Fletcher Allen<br>(the hospital<br>system here in<br>Burlington). As<br>far as I know<br>students are<br>given most of<br>the same EMR<br>access<br>privileges as<br>MDs, though<br>setting up<br>remote access<br>was not formally<br>publicized to<br>students during |   | check on overnight events and review OR<br>schedules, etc. Most students feel the<br>same way, I think.   |
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| University of<br>Iowa    | Any employee has off<br>site access to EPIC,<br>the EMR. We have a<br>website with remote<br>links to hospital<br>programs. From here<br>we log on to the<br>website and then<br>again onto the EMR<br>program the same as<br>we would at the<br>hospital. It works<br>great! |  | our orientation.  |   |   |
| University of<br>Vermont | Yes.  | No.  | Since just after<br>we got an EMR,<br>about 1.5 years<br>ago.   | I was simply<br>forwarded a link to<br>the online access<br>tool and this has<br>been perpetuated<br>among students at<br>our institution. The<br>faculty is aware that<br>we have access and<br>there has never been<br>a dispute over safety. | 1. Ability to read up on patients to have<br>surgery the night before from the comfort<br>of my home in order to be prepared for the<br>cases the next day. 2. After long nights on<br>call, if notes were not completely finished,<br>the chief resident would not infrequently<br>suggest that I go home and finish them<br>there instead of being tethered to the<br>hospital where there are so many<br>interruptions. 3. When preparing projects<br>or presentations on patients I was able to<br>look up important data from home or the<br>library instead of having to trek to the<br>hospital, find a vacant computer and either<br>print off, sensitive info or spend hours<br>consuming precious computer space<br>when clinical faculty are needing to chart. |