

Teledentistry: Creating a Stronger and More Proficient Communication Between Dentists and ED Physicians at LVHN?.

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Teledentistry: Creating a stronger and more proficient communication between dentists and ED physicians at LVHN?

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BACKGROUND

- Telemedicine is the use of technology to communicate and exchange clinical information between two providers for diagnosis and consultations.
- Many departments at LVHN (TeleDerm, TelePsych, TeleBurn) have successfully implemented it into their departments.
- The implementation of dental technology at LVHN will alleviate miscommunication between departments at the hospital.
- The technology will aid in potential transfer cases from outside network facilities.
- Teledentistry will create a better and more proficient communication between the ED physicians and dentists that are on-call to treat dental emergencies (Fig 1).
- Dentists will be able to assess and triage the patient immediately (Fig 2).
- Treatment time will be reduced and there will be more immediate direct care.
- A pilot program will start at Cedar Crest, Muhlenberg, and 17th & Chew St.



Fig 1. Intraoral camera system connected to a tablet that is used to see inside a mouth.

tiger text
Work Securely

Fig 2. HIPAA secure texting app that allows communication between patient/physician and physician/physician

Epic

Fig 3. Electronic record software used at LVHN

PROJECT OUTLOOK

Benefits

- Faster care and faster disposition time
- Real time interaction between patient, ER resident and dental resident (triage)
- Educational for ED from dental perspective
- Easy outreach to community
- Convenient oral evaluations without dentists driving to all campus's
- Saves money
- Appointment efficiencies for clinic
- Enable earlier diagnosis
- Avoid dental neglect

Challenges

- Level of confidentiality
- Technological issues, image resolution/connectivity
- Efficiency of camera use depending on how many cameras are purchased
- Reimbursement issues
- Time it takes to train and implement both emergency room physicians and dentists

Fig 4. Benefits and challenges for the implementation of Teledentistry

METHODS

Understand current system for dental emergencies

Understand how other departments at LVHN use Telemedicine (i.e. TeleBurn)

Look at implications and differences from other departments that use Telemedicine (the need for special cameras vs. phone)

Figure out benefits and challenges for both ED and dental department (Fig 4)

Talk to TeleHealth services committee to build plan for implementation

Look for ideal hardware (i.e. camera systems) to suit hospitals needs: price, ease of use, integration into EPIC (Fig 3)

Future: educate residents and implement workflow diagram (Fig 5)

Expand to other LVHN campus's and implement in Miles of Smiles dental van

WORKFLOW DIAGRAM

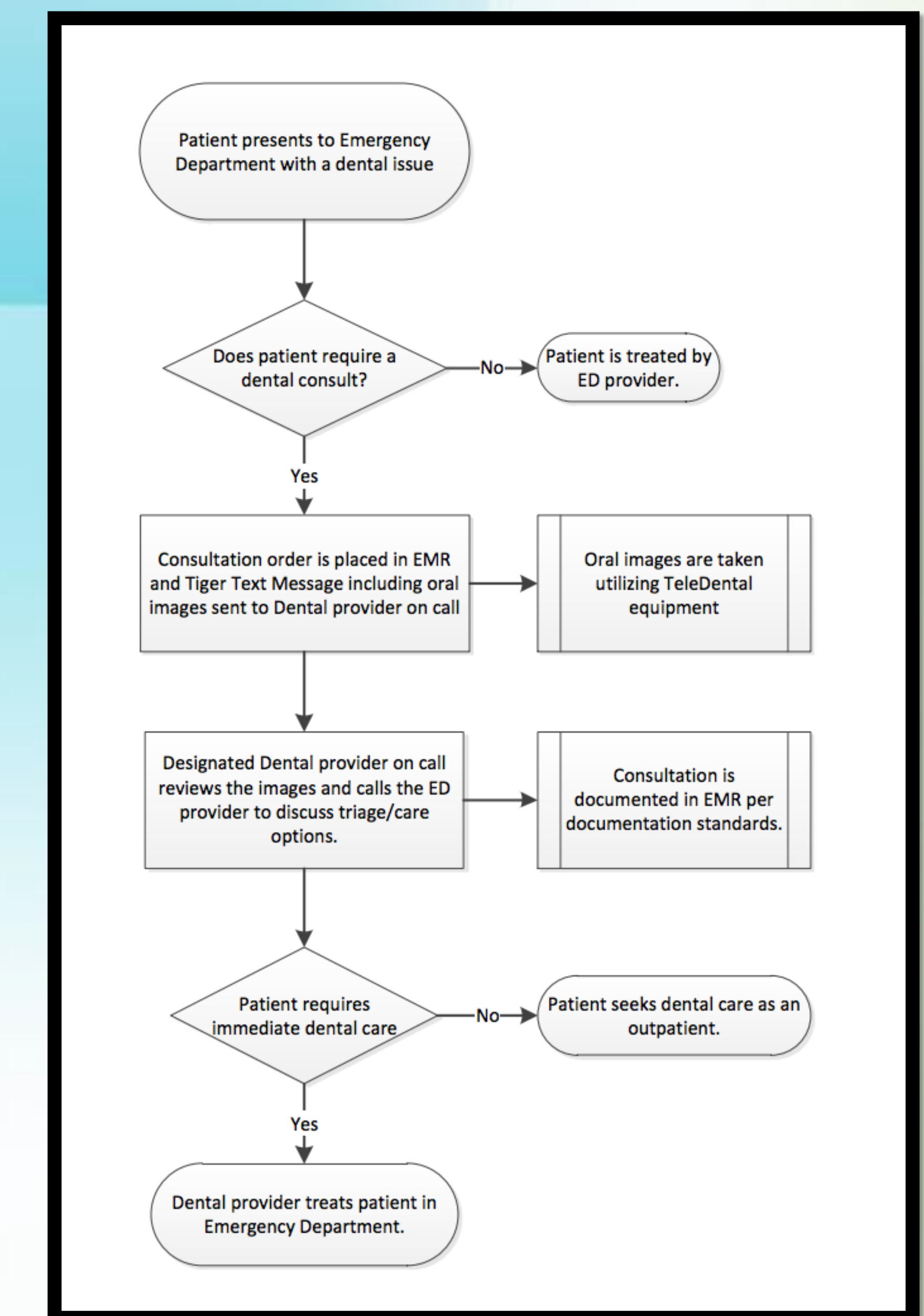


Fig 5. Working protocol for a dental emergency when patient goes to the ER. There is currently no protocol in writing at LVHN for the Emergency Department. This was created using current protocol information and talking to physicians and dentists to determine when the intraoral camera will be used on a patient.

FUTURE DIRECTION

- Train the dental residents and ED residents to use the camera and teach them the appropriate time to implement
- Find a way to facilitate integration into EPIC
- Incorporate into Miles of Smiles traveling dental van
- Prospective study on success once implemented
- Gather data to support the benefits of Teledentistry at the hospital
 - There is limited access to dental emergency data because there is no record of total dental emergency inflow and how it was communicated to dental resident on call.
- Determine whether the implementation of Teledentistry created a stronger and more proficient communication between dentists and ED physicians

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