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## Dental Basics for the PCP

Tierra Lynch

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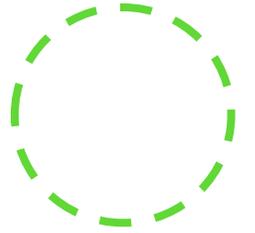
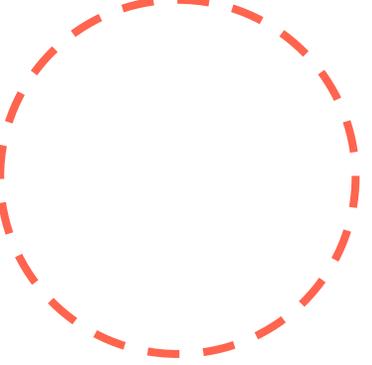
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# DENTAL HEALTH

## FOR THE PCP

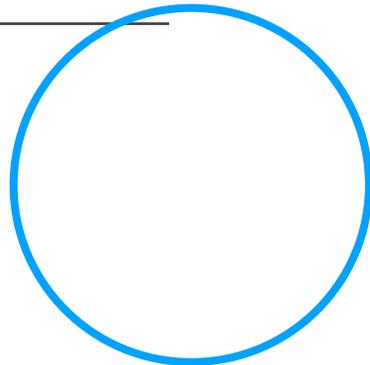
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TIERRA LYNCH

FAMILY MEDICINE CLERKSHIP

LEWISTON, MAINE

3/26/21



# IDENTIFICATION OF NEED

A 43 yo M presents to clinic with complaint of "dental pain." He had lost his dental insurance several years ago when he lost his job. He felt he did not know where to go, and felt he could not afford to see a dentist. Upon exam, he has severe evidence of severe decay and several broken teeth.

- *What can we offer him as his PCP?*
- *How to identify, stabilize, and manage common dental pathologies?*
- *What resources are available to patients without dental insurance or other financial concerns?*

Residents and staff expressed feeling unprepared to answer these questions.



Severe Dental Caries CC BY-SA 4.0 <sup>1</sup>



# PUBLIC HEALTH COST

- Dental health is a key component of systemic health, but remains a sorely undermet need in healthcare
- **Dental problems are common<sup>2</sup>**
  - 1/5 children have 1 or more decayed teeth
  - 50% of adults have periodontal disease
- **Oral health and physical health are inexorably linked<sup>2</sup>**
  - Treating periodontal disease leads to a 10-20% improvement in glycemic control in diabetic patients
  - Poor glycemic control causes a 3x increased risk of periodontal disease
  - Poor dental health has been linked to inflammatory diseases such as cardiovascular disease, rheumatoid arthritis, preterm labor, and strokes.





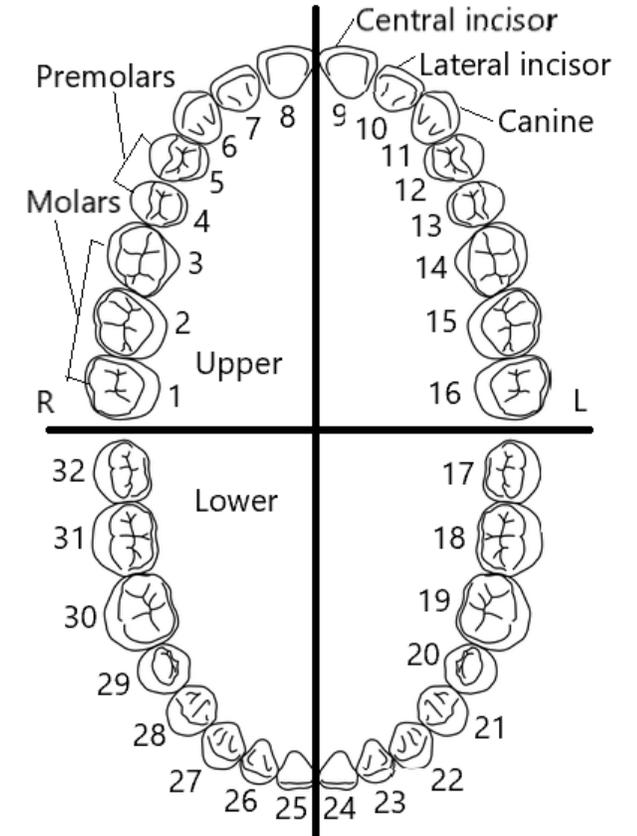
# PUBLIC HEALTH COST CONT.

## - Gaps in Medical School curriculum?

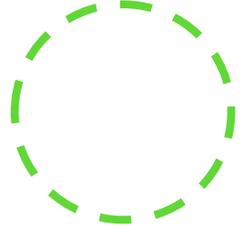
- A study in Academic Medicine showed that ~70% of medical schools offer 5 hours or less of dental education.<sup>3</sup>

## - Decreased access to dental care, especially in rural regions

- Many patients lack dental insurance, face long scheduling times, and health literacy challenges.
- Of those who have medical insurance coverage, only a fraction have dental coverage.<sup>2</sup>
- 11 million people see their PCP regularly, but not a dentist.<sup>4</sup>
- State/federal insurances like Medicaid/Medicare do not cover preventative dental care for patients >20 yo.<sup>4</sup>



Teeth Numbering Diagram CC BY-SA 4.0 <sup>5</sup>



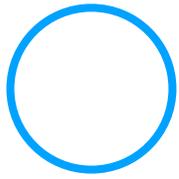
# INTERVENTION AND METHODOLOGY

1. Performed literature search for dental and oral health resources and best practice guidelines for primary care physicians

2. Using Maine DOH resources and local dentist clinics, compiled a database of local dental resources for patients without dental insurance or other financial concerns

3. Sought interprofessional collaboration with local dentist offices on how to improve protocols, and additional local resources for practitioners and patients.

4. Sought input and feedback from potential users at the primary care clinic





# THE LEWISTON PERSPECTIVE

**Dr. KC,** Attending, Family Medicine Residency:

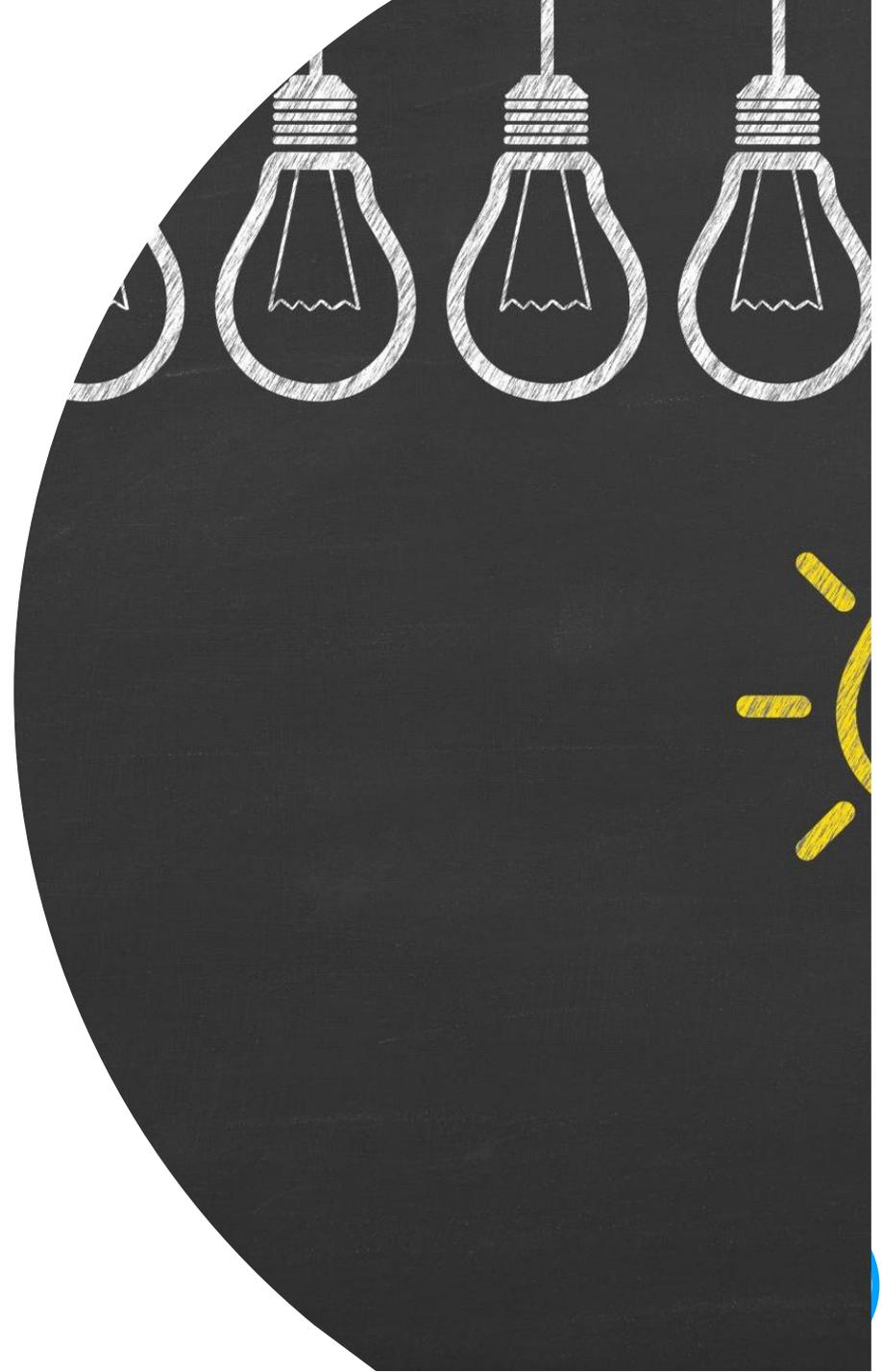
"I think that **we so often underestimate the impact** of dental hygiene on overall health. And the PCPs have taken up that responsibility as **dental care is so limited**, especially in rural settings."

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**Dr. PP,** Attending at Bates Student Health:

"It is a problem and people who are reliant on state and federal insurances have **less access**. This goes hand in hand with not having **preventative dental care** coverage and only urgent or emergent coverage. It's a ubiquitous problem. I see this too with Bates' Student Health Insurance too.

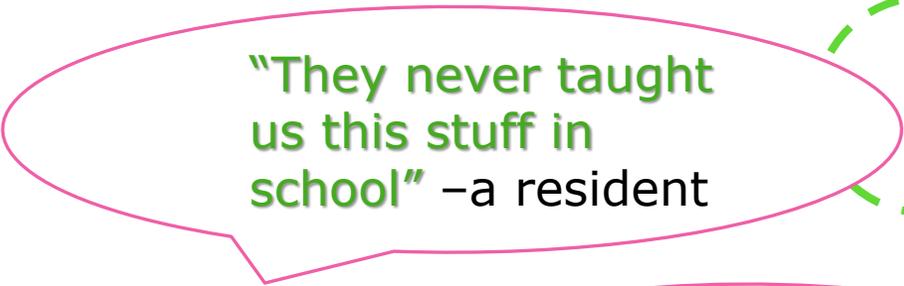
I see the **PCP's role as education**: teeth brushing, flossing etc. We talk about it with kids, well actually their parents, but we don't continue this on for adults."



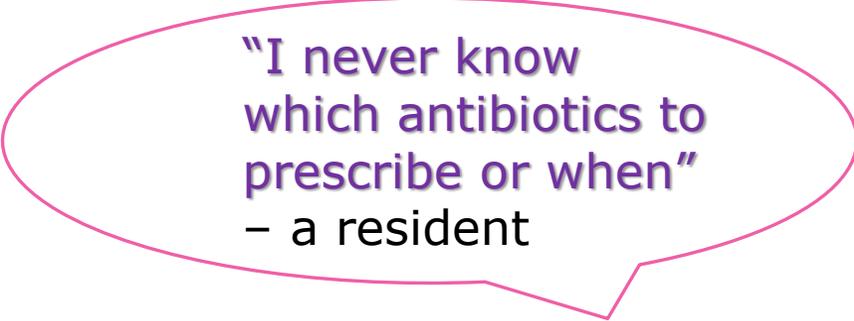
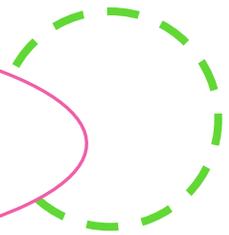


# QUALITATIVE RESULTS

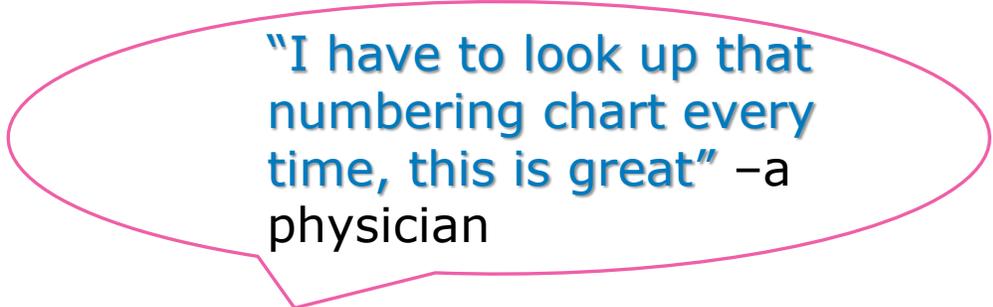
- Created document: *Dental basics for the PCP*
  - Basic dental anatomy
  - How to identify, stabilize, and manage common dental pathologies
  - Links to additional learning resources
- Created resource compiling local dental offices and clinics for patients with financial concerns or lacking dental insurance
- Created EHR auto-text for providers to easily share basic oral health recommendations with their patients



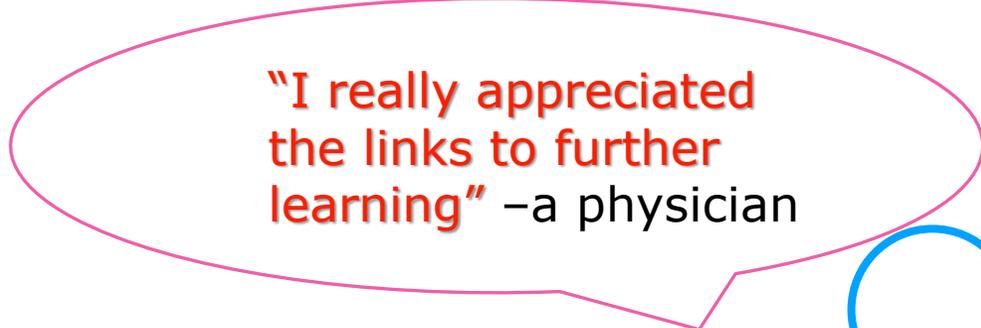
"They never taught us this stuff in school" –a resident



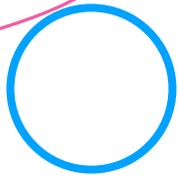
"I never know which antibiotics to prescribe or when"  
– a resident



"I have to look up that numbering chart every time, this is great" –a physician



"I really appreciated the links to further learning" –a physician





# EVALUATION OF EFFECTIVENESS

## **Effectiveness**

- Received positive feedback, input and questions from staff of the Lewiston Family Practice Residency.
- Received positive feedback regarding collaborative efforts with local dental clinics
- Increased discussions and awareness of the importance of oral health and the role of the primary care doctor
- Increased interprofessional collaboration between local dental and primary care practitioners

## **Limitations**

- Due to time considerations, implementation and tracking of usage of the document and resource was not possible during the rotation.
- Difficulty in seeking feedback and input from local dental offices regarding the Dental Basics for PCP document.
- Dental issues are an infrequent primary complaint in the PCP office, though a common comorbidity or secondary problem.



# FUTURE INTERVENTIONS

- Track use of the resources and continue to seek evaluative feedback regarding usability, pertinence, and ability to meet the specific oral health needs of the Lewiston community.
- Seek additional input from local dental offices, Department of Health, and other primary care offices.
- Continue to update resources according to guideline updates and local availabilities
- Share resource to other primary care offices in Lewiston and Maine



# References

1. Severe Dental Caries, Ickyvickywiki, CC BY-SA 4.0 <<https://creativecommons.org/licenses/by-sa/4.0>>, via Wikimedia Commons
2. "Relationship of Oral and Systemic Health." *Smiles for Life Oral Health*. A national oral health curriculum. <https://www.smilesforlifeoralhealth.org/>. Published October 26, 2020. Accessed March 6, 2021.
3. Ferullo A, Silk H, Savageau JA. Teaching oral health in U.S. medical schools: results of a national survey. *Acad Med*. 2011 Feb;86(2):226-30. doi: 10.1097/ACM.0b013e3182045a51. PMID: 21169775.
4. Industry Overview. WhyDental.org. <https://www.whydental.org/about/industry-overview>. Accessed March 19, 2021.
5. Teeth numbering Diagram, Adapted by this author, from Quercus solaris, CC BY-SA 4.0 <<https://creativecommons.org/licenses/by-sa/4.0>>, via Wikimedia Commons.

Cone, K. and Mason, J., 2018. Dental Trauma. EM:RAP <https://www.emrap.org/episode/emrap20186/dentaltrauma> [Accessed 16 March 2021].

Farah, J. and Mason, J., 2018. Dental Pain. EM:RAP. <https://www.emrap.org/episode/ent/dentalpain> [Accessed 16 March 2021].

Fouad AF, Abbott PV, Tsilingaridis G, et al. International Association of Dental Traumatology guidelines for the management of traumatic dental injuries: 2020;36:331-342. [https://www.aapd.org/media/policies\\_guidelines/e\\_avulsion.pdf](https://www.aapd.org/media/policies_guidelines/e_avulsion.pdf)

Maine. Fromthefirsttooth.org. Published August 9, 2017. Accessed March 16, 2021. <https://www.fromthefirsttooth.org/by-state/maine/>

Ram D, Cohenca N. Therapeutic Protocols for Avulsed Permanent Teeth: Review and Clinical Update. *Pediatric Dentistry* . 2004;26(3). <https://www.aapd.org/globalassets/media/publications/archives/ram-26-03.pdf>

Smiles for Life Oral Health. Smiles for Life Oral Health | A national oral health curriculum. <https://www.smilesforlifeoralhealth.org/>. Published October 26, 2020. Accessed March 6, 2021.

Stephens MB, Wiedemer JP, Kushner GM. Dental Problems in Primary Care. *Am Fam Physician*. 2018 Dec 1;98(11):654-660. PMID: 30485039. <https://pubmed.ncbi.nlm.nih.gov/30485039/>

Warnke PH, Becker ST, Springer IN, Haerle F, Ullmann U, Russo PA, Wiltfang J, Fickenscher H, Schubert S. Penicillin compared with other advanced broad spectrum antibiotics regarding antibacterial activity against oral pathogens isolated from odontogenic abscesses. *J Craniomaxillofac Surg*. 2008 Dec;36(8):462-7. doi: 10.1016/j.jcms.2008.07.001. Epub 2008 Aug 29. PMID: 18760616. <https://pubmed.ncbi.nlm.nih.gov/18760616/>