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## Assessing Oral Health Curriculum in U.S. Family Medicine Residency Programs: A National Survey

Ronnelle King

*University of Massachusetts Medical School*

*Et al.*

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Ronnelle King<sup>1</sup> MSIV, Hugh Silk<sup>1</sup> MD, MPH, FAFAP, Judith Savageau<sup>1</sup> MPH, Ian M. Bennett<sup>2</sup> MD, PhD, Alexander W. Chessman<sup>3</sup> MD  
<sup>1</sup>University of Massachusetts Medical School, <sup>2</sup>Perelman School of Medicine of the University of Pennsylvania, <sup>3</sup>Medical University of South Carolina

## Introduction

Oral health is an essential, but often overlooked, aspect of health care. Dental caries can destroy teeth and cause abscesses while periodontitis can contribute to systemic illness such as heart disease and autoimmune disorders. In 2000, the Surgeon General summarized this evidence calling for improved physician training in oral health.<sup>1</sup> Significant disparities in dental health care and outcomes make this a key issue for primary care physicians who provide care to vulnerable populations.<sup>2</sup>

The Surgeon General's report was a catalyst for change over the past decade. The Society of Teachers of Family Medicine supported an initiative called *Smiles for Life: A National Oral Health Curriculum* funded in part by the Health Services and Research Administration (HRSA) and Dentaquest Foundation.<sup>3</sup> Concurrently, the Institute of Medicine (IOM) issued 2 reports on this subject<sup>4,5</sup> and the Department of Health and Human Services (HHS) launched their own Oral Health Initiative.<sup>6</sup> The Accreditation Council for Graduate Medical Education (ACGME) also added oral health care requirements with the aim of promoting increased resident training in oral health.<sup>7</sup>

## Purpose

Our study was designed to collect information about oral health care training in family medicine residency programs nationwide. We aimed to learn what programs are teaching, and the factors associated with achieving curricular objectives outlined by *Smiles for Life (SFL)*.

## Methods

Data were gathered as part of the CAFM Educational Research Alliance (CERA) survey of family medicine residency directors. The methods and demographics of that survey are presented elsewhere in the current issue of *Family Medicine*.<sup>8</sup>

Residency directors were asked to indicate the number of hours devoted to oral health, coverage of specific oral health topics, barriers to implementing training in this area, use of fluoride varnish, use of the SFL curricula, and the involvement of an oral health professional.

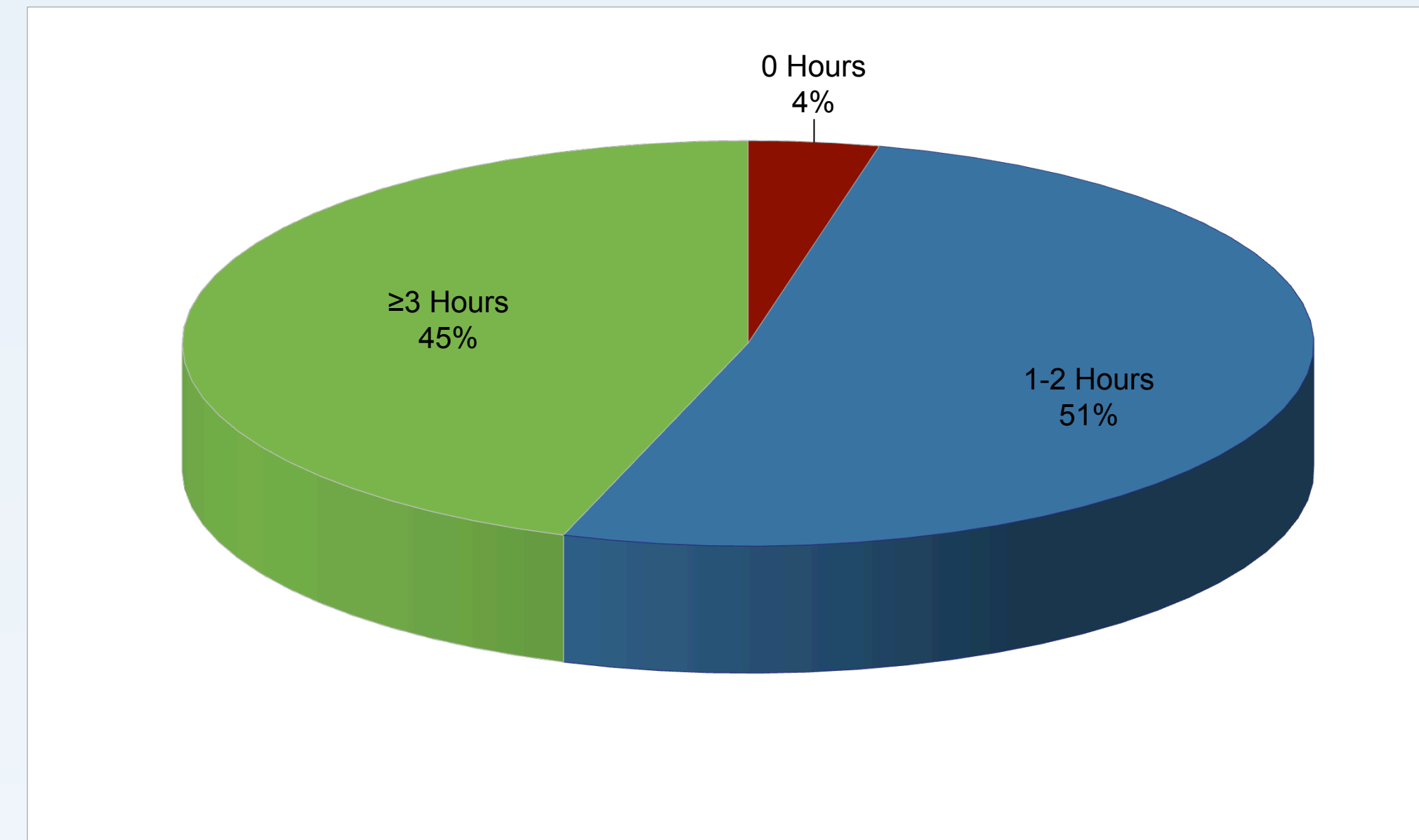
Perceived importance and satisfaction with oral health training as well as preparedness for oral health board exam questions were assessed using a five-item Likert scale for level of agreement ranging from "Strongly Disagree" to "Strongly Agree." For analysis, responses were dichotomized to 'strongly agree/agree' versus 'all others'.

A response rate of 38% (172) was obtained. Of these, 11 were removed for our analysis because program directors did not respond to any of the oral health questions, and 5 were removed because there were no responses to questions regarding residency director attitudes towards oral health training.

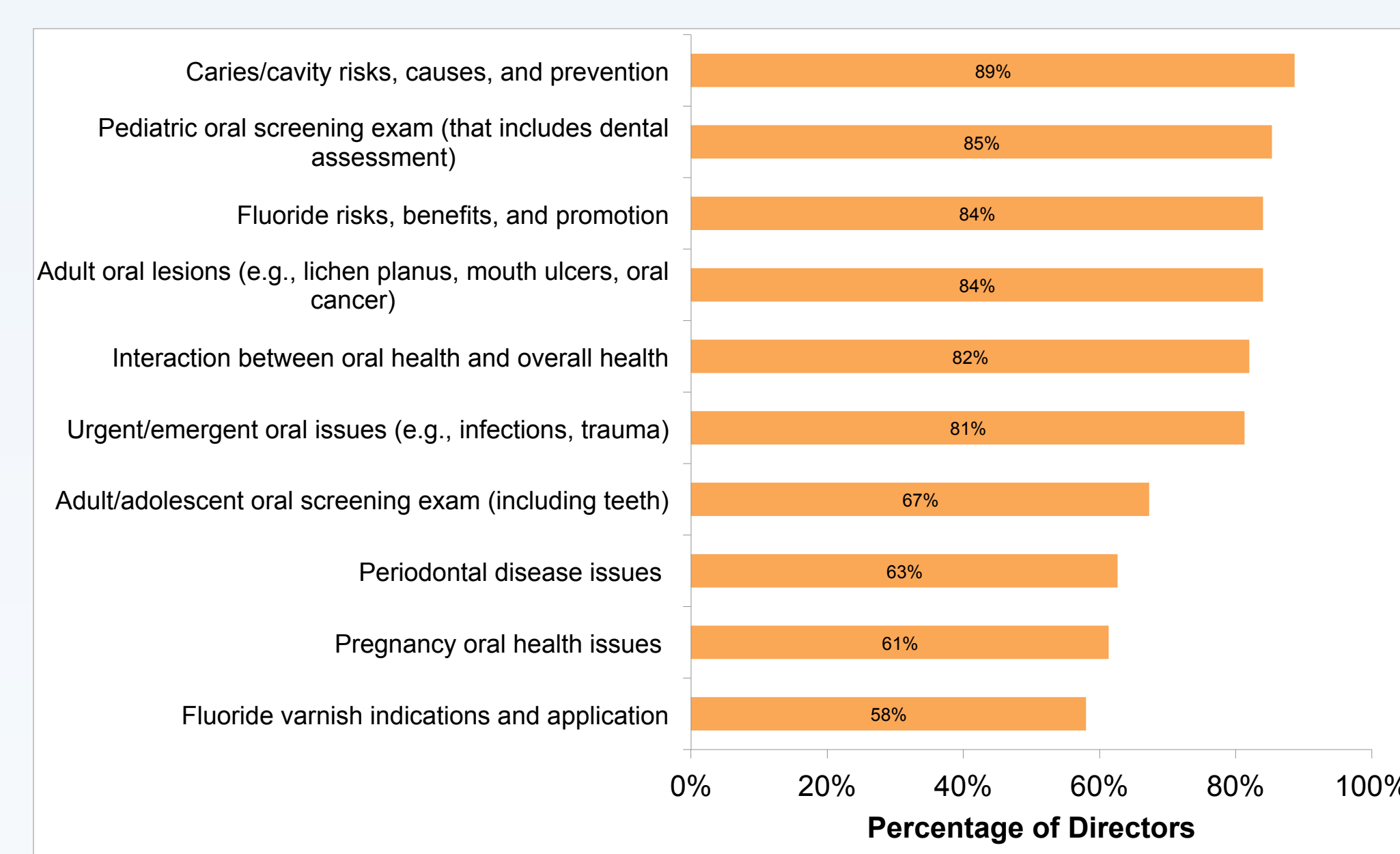
Descriptive analyses were carried out using methods appropriate to categorical responses. Bivariate associations were determined using the chi-square statistic with a p value < .05 used to define statistical significance.

## Results

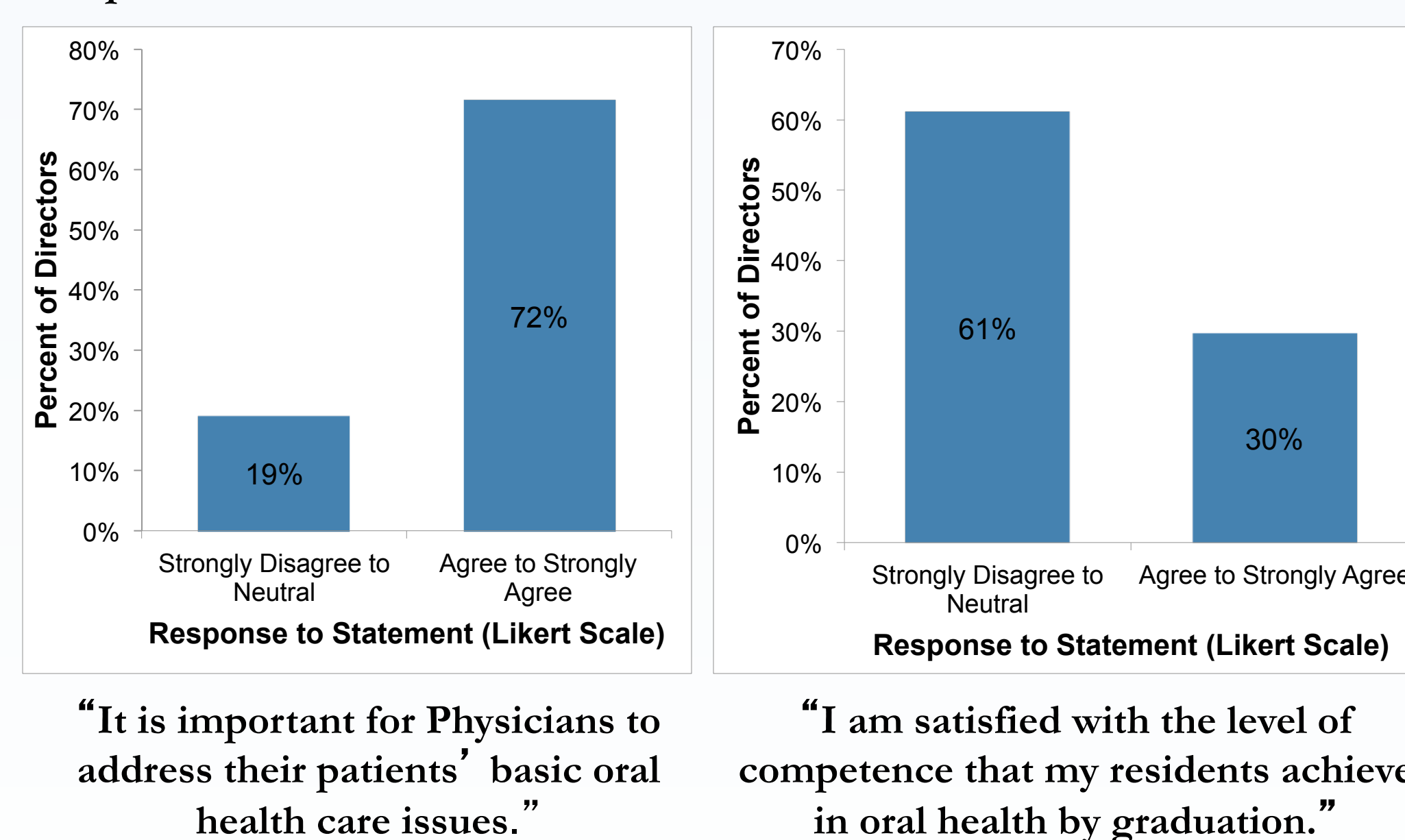
**Figure 1: Hours of Oral Health Training Included in Family Medicine Residency Programs.**



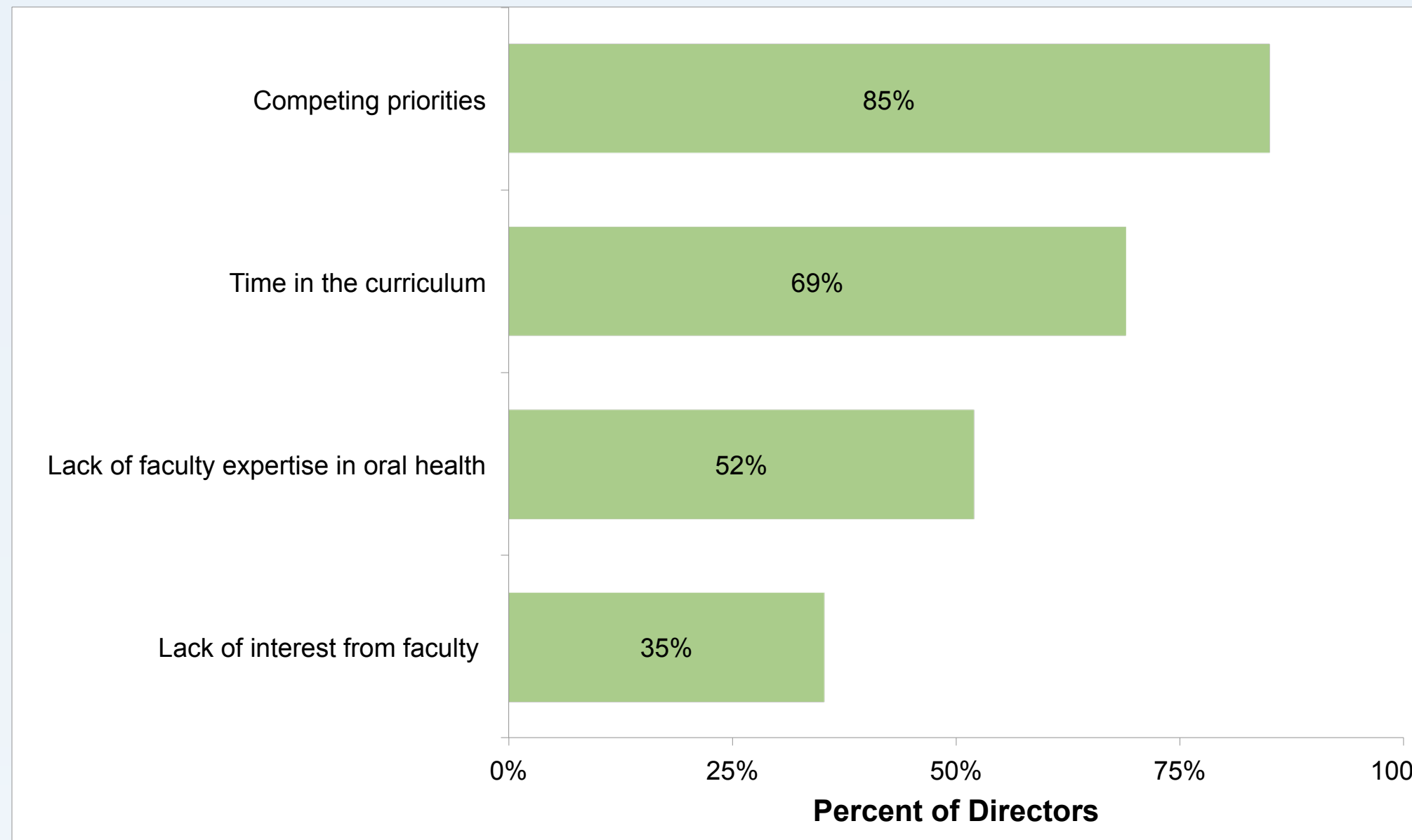
**Figure 2: Oral Health Topics Included in FM Residency Training**



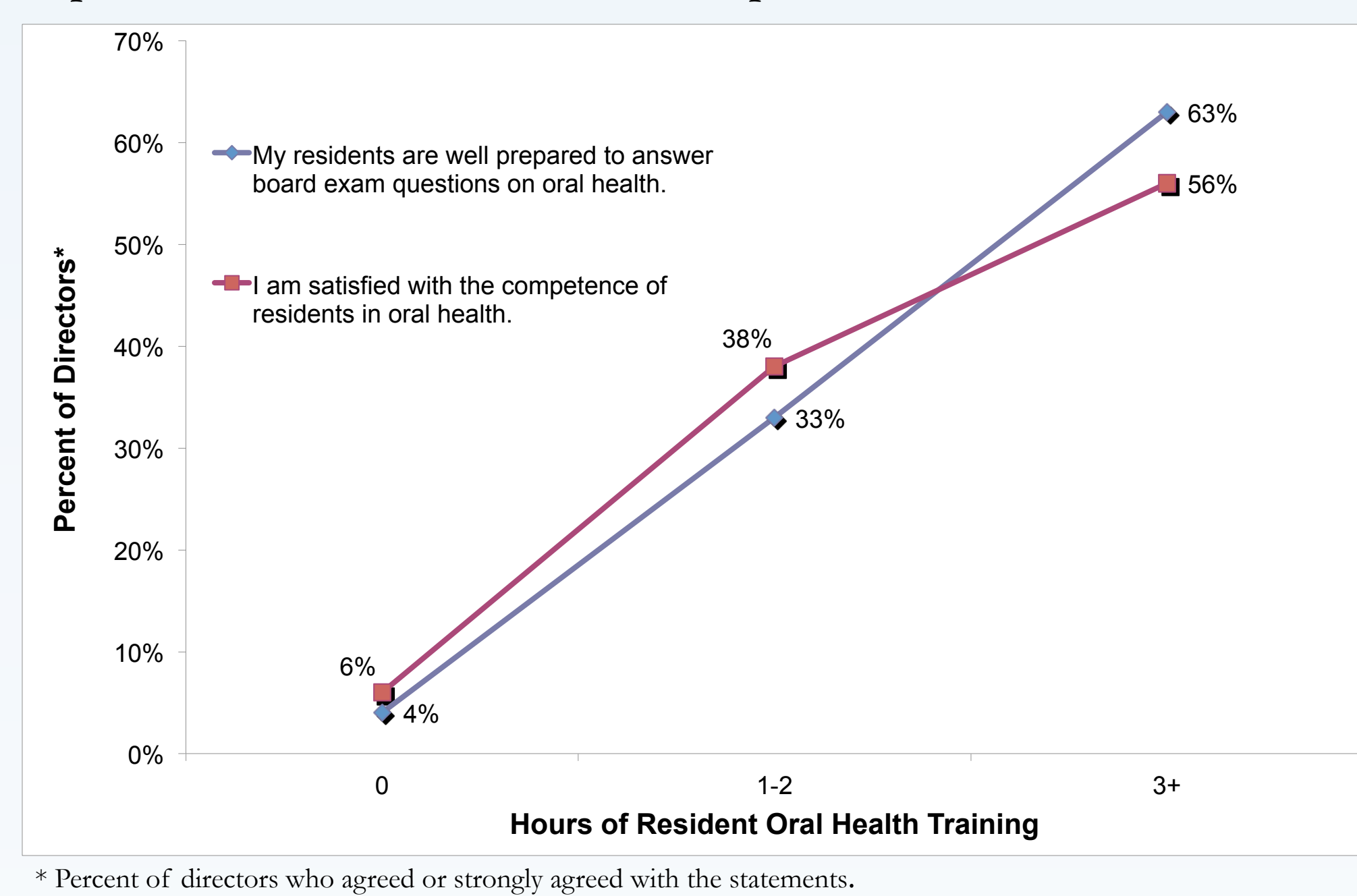
**Figure 3: Disparity between importance of oral health and resident competence.**



**Figure 4: Perceived Barriers to Expanding Oral Health Training in Family Medicine Residencies**

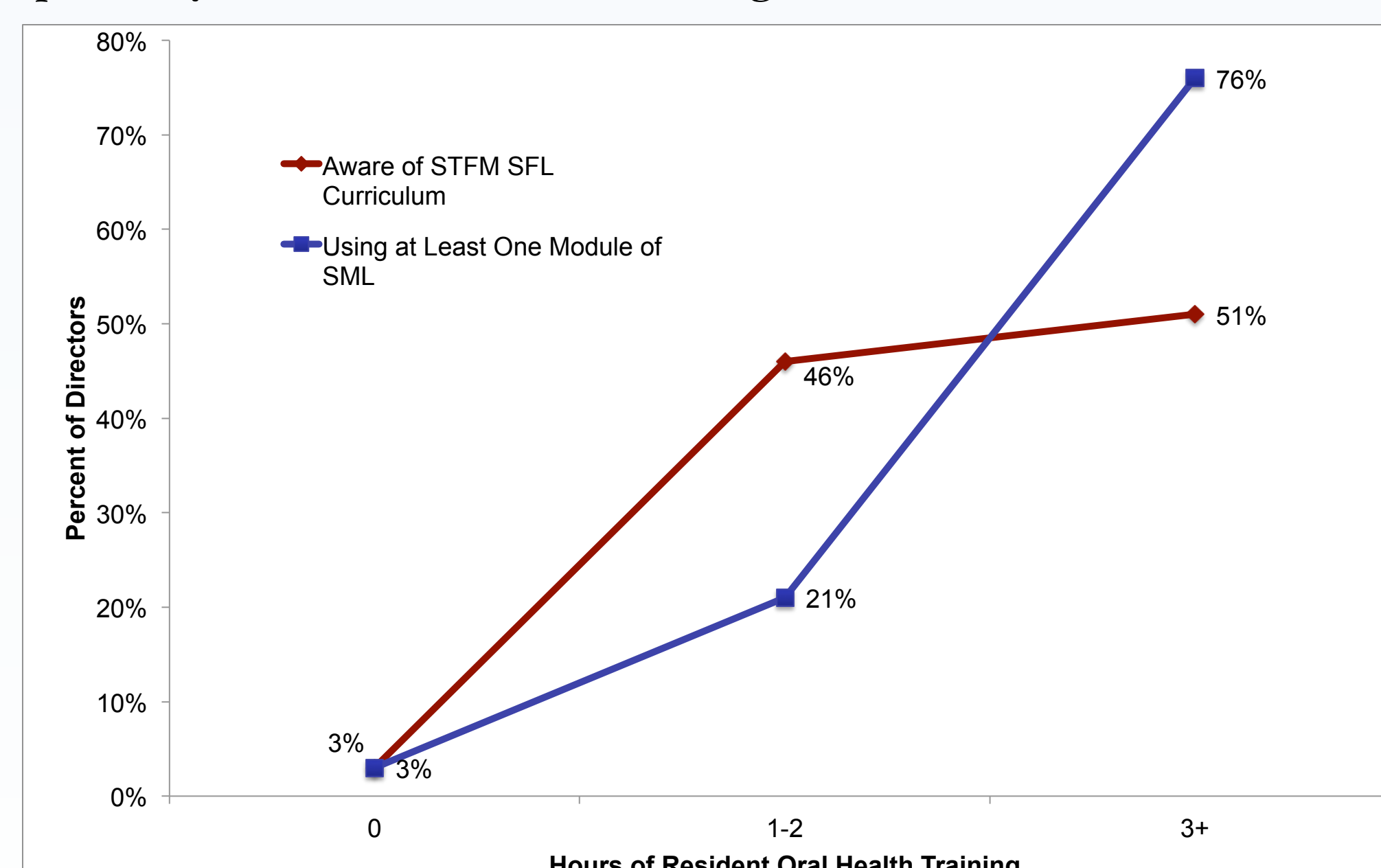


**Figure 5: Correlation between hours of oral health training and self reported satisfaction with resident competence.**



\* Percent of directors who agreed or strongly agreed with the statements.

**Figure 6: Awareness and Use of STFM *Smiles for Life* Curriculum positively associated with more training hours.**



## Conclusion

While nearly three-fourths of residency program directors in the current survey acknowledged the value of oral health as a training topic, this percentage is actually lower than reported in 2005, when 95% of directors rated this topic as important.<sup>9</sup> On the other hand, compared to a survey in 2009, a larger proportion of programs report dedicating more than 2 hours (45% versus 38%), and fewer programs are committing 0 hours (4% versus 10%) to oral health.<sup>10</sup>

Greater efforts are needed to extend the gains in oral health training that have been seen in the last decade. Increasing faculty expertise (i.e., identifying an 'oral health champion'), promoting the *Smiles For Life* curriculum, and increasing the number of total hours of oral health training may be strategic targets of these efforts.

## References

- 1 US Department of Health and Human Services. Oral health in America. A report of the surgeon general. Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000. <http://www.nidcr.nih.gov/AboutNIDCR/SurgeonGeneral/> Accessed January 6, 2012.
- 2 Dye BA, Tan S, Smith V, et al. Trends in oral health status: United States, 1988-1994 and 1999-2004. *Vital Health Stat.* 2007 Apr;11(248):1-92Table 1. Frequency and Characteristics of Oral Health.
- 3 Douglass AB, Maier R, Deutchman M, Douglass JM, Gonsalves W, Silk H, Tysinger JW, Wrightson AS. *Smiles for life: A national oral health curriculum*. 3rd edition. Society of Teachers of Family Medicine. 2010. [www.smilesforlifeoralhealth.com](http://www.smilesforlifeoralhealth.com) Accessed January 6, 2012.
- 4 (IOM) Institute of Medicine. 2011. *Advancing oral health in America*. Washington, D.C. The National Academies Press. <http://www.nap.edu/openbook.php> Accessed January 6, 2012.
- 5 (IOM) Institute of Medicine and (NRC) National Research Council. 2011. *Improving access to oral health care for vulnerable and underserved patients*. Washington, D.C. The National Academies Press. [http://books.nap.edu/openbook.php?record\\_id=13116&page=R1](http://books.nap.edu/openbook.php?record_id=13116&page=R1) Accessed January 6, 2012.
- 6 US Department of Health and Human Services. HHS Oral Health Initiative 2010: Promoting and Enhancing the Oral Health of the Public. <http://www.hrsa.gov/publichealth/clinical/oralhealth/hhsinitiative.pdf> Accessed January 6, 2012.
- 7 Accreditation Council for Graduate Medical Education. ACGME program requirements for graduate medical education in family medicine. 2007. Page 27. IV.A.5.b).(5).(d) Surgical Subspecialties. [http://www.acgme.org/acWebsite/downloads/RRC\\_progReq/120pr07012007.pdf](http://www.acgme.org/acWebsite/downloads/RRC_progReq/120pr07012007.pdf) Accessed January 6, 2012.
- 8 Mainous AG, Seehusen D, Shokar N. CAFM educational research alliance (CERA) 2011 residency director survey: Background and methods. *Fam Med* 2012 fill in page numbers once set.
- 9 Gonsalves WC, Skelton J, Heaton L, Smith T, Feretti G, Hardison JD. Family medicine residency directors' knowledge and attitudes about pediatric oral health education for residents. *J Dent Ed* 2005;69(4):446-452.
- 10 Douglass AB, Deutchman M, Douglass J, Gonsalves W, Maier R, Silk H, Stevens N, Tysinger J, Wrightson AS. Incorporation of a national oral health curriculum into family medicine residency programs. *Fam Med* 2009;41(3):159.

