

Introduction

This quality improvement study assesses whether increased patient education through a mammography consent form including reviewing the benefits of digital breast tomosynthesis (DBT), results in higher rates of patients electing DBT, instead of only 2D mammography, or full-field digital mammography (FFDM).

Purpose

Breast cancer is the second most common cancer diagnosis after skin cancer and the second leading cause of cancer death in women after lung cancer. A recent change in Texas law mandated insurance companies cover DBT; early data has indicated a dramatic increase in DBT utilization since that time. This study aims to determine whether revising consent forms to explain indications and benefits of DBT can increase DBT utilization.

Materials and Methods

This study retrospectively analyzes and compares trends in use of DBT and FFDM across a large network of general diagnostic imaging centers in North Texas. The rates of DBT and FFDM utilization were assessed over 6-month periods before and after the implementation of a revised consent form which explains the indications and benefits of DBT.

Sec. 1356.005. COVERAGE REQUIRED. (a) **A health benefit plan** that provides coverage to a female who is 35 years of age or older **must include coverage for an annual screening by all forms of low-dose mammography** for the presence of occult breast cancer.

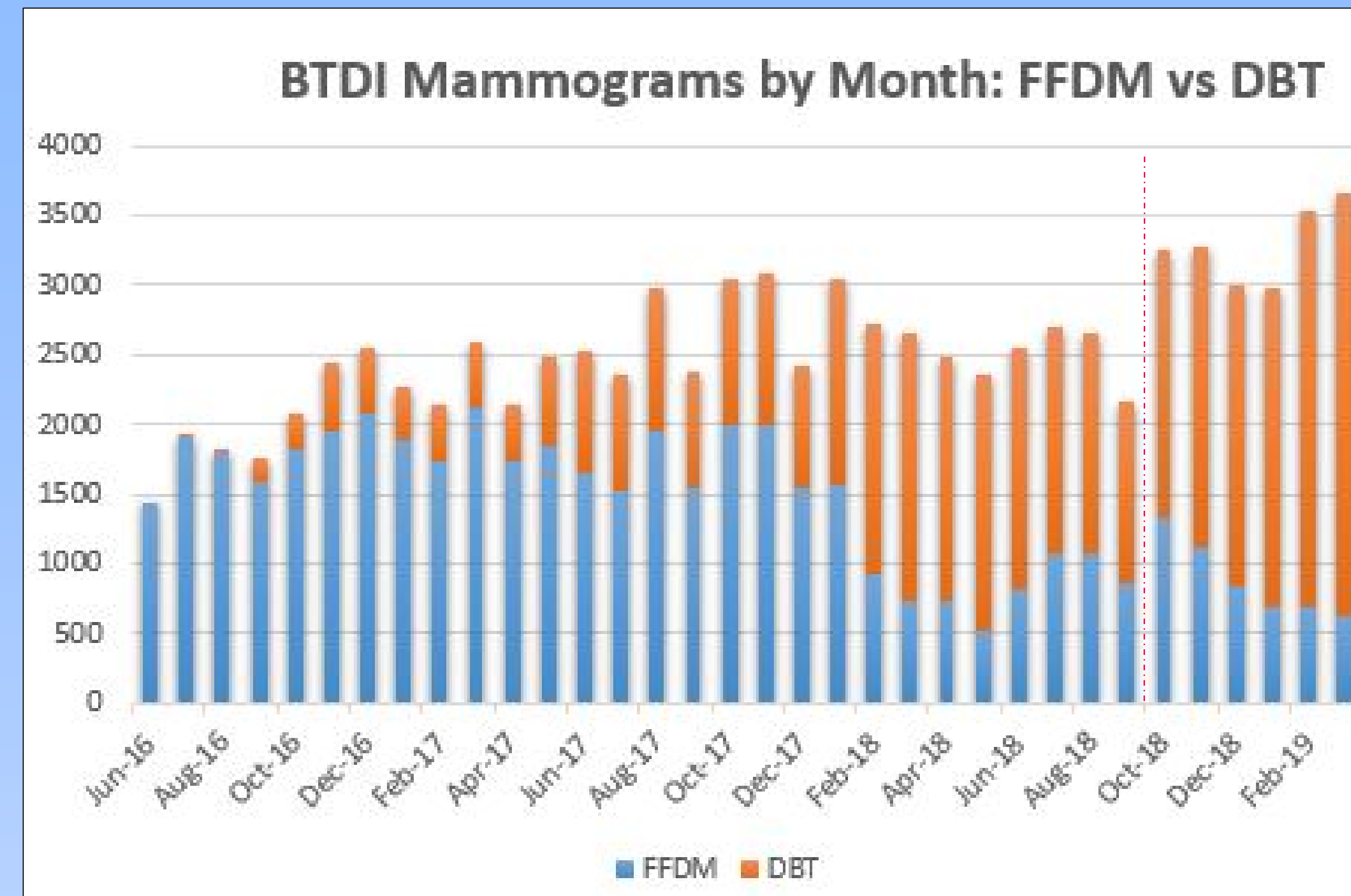
(a-1) A health benefit plan that provides coverage for a screening mammogram must provide coverage for a diagnostic mammogram that is no less favorable than the coverage for a screening mammogram.

(b) Coverage required by this section:

(1) may not be less favorable than coverage for other radiological examinations under the plan; and

(2) must be subject to the same dollar limits, deductibles, and coinsurance factors as coverage for other radiological examinations under the plan.

A law in Texas (H.B. No. 1036) has required insurance companies to cover DBT since January 1, 2018.



Utilization of conventional 2D and DBT Mammography at a large network of diagnostic imaging centers in North Texas. The red line indicates implementation of patient education forms.



Utilization of DBT at a large network of diagnostic imaging centers in North Texas from June 2016 to February 2019.



Utilization of conventional 2D Mammography at a large network of diagnostic imaging centers in North Texas.

3D MAMMOGRAPHY CONSENT FORM

Benefits of 3D Breast Tomosynthesis

- **Fewer patient recalls for additional imaging, resulting in less cost and reduced short-term anxiety.** Clinical studies have concluded 3D mammography significantly reduces the number of unnecessary recalls by up to 40% (or more).
- **Better cancer detection.** 3D mammography has shown to have higher cancer detection rates than traditional 2D mammography. Radiologists are now able to see "inside" the breast, layer by layer, to detect cancers earlier than ever. 3D mammography is beneficial for all patients, regardless of the density of their breast tissue or whether they have a family history of breast cancer.
- **No increased exam time or discomfort for a 3D exam versus a 2D exam.**
- **Annual routine screening 3D mammography is covered by a health benefit plan that provides coverage to a female who is 35 years of age or older per Texas State Law (Texas House Bill 1036).** This mandate applies to coverage under a group health benefit plan provided to residents of Texas regardless of whether the group policy or contract is delivered, issued for delivery, or renewed within or outside of the state.

Please select one of the following options regarding your mammogram:

YES, I would like to have a 3D mammogram. I understand there may be an additional cost for 3D services and final cost of my mammogram is dependent on my insurance coverage.

NO, I do not wish to have a 3D mammogram.

Patient Name: _____

Patient Signature: _____ Date: _____

Results

- ▶ In the 6 months prior to the implementation of the revised consent form (04/2018 – 09/2018), mean DBT utilization was 66% (9,805 DBT exams out of 14,900 total exams).
- ▶ In the 6 months after the revised form was implemented (10/2018 – 03/2019), mean DBT utilization was 73% (14,409 DBT exams out of 19,722 total exams), resulting in a 10.6% increase in utilization.

Conclusions

- ▶ Our results indicate that patient education through a revised consent process which explains the indications and benefits of DBT may result in a modest increase in DBT utilization.
- ▶ Simple efforts at patient education, even passively through a form elucidating the benefits of 3D mammography at the time of registration, yields clinically significant increases in patient adoption.

References

Texas Insurance Code § 1356.005(a) (2019).
<https://statutes.capitol.texas.gov/Docs/IN/htm/IN.1356.htm>.