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Appendix

This appendix was part of the submitted manuscript and has been peer reviewed.
It is posted as supplied by the authors.

Appendix to: Vreugdenburg TD, Laurence CO, Willis CD, et al. Content analysis of Australian direct-to-consumer websites for emerging breast cancer imaging devices. *Med J Aust* 2014; 201: 289-294. doi: 10.5694/mja13.10170.

Appendix 1: Codebook Taxonomy

Main code category	Sub-code category	Code description
Comparison with conventional imaging	Direct comparison	The device is directly compared to other established breast imaging e.g. *"earlier detection than a mammogram"*
	Indirect comparison	The device is compared with other imaging, but comparator is not named, e.g. *"the earliest possible detection of cancer"*
	Benefits of a comparator	A description of the current benefits of a comparator, e.g. *"high sensitivity, effective at detecting early breast cancer"*
	Limitations of a comparator	A description of the current limitations of a comparator, e.g. *"exposes women to harmful radiation"*
Device performance	Diagnostic sensitivity	The ability of the device to correctly identify disease-positive individuals, e.g. *"a high sensitivity to breast pathology"*
	Diagnostic specificity	The ability of the device to correctly identify healthy individuals or benign tissue, e.g. "*correctly identifies 98% of benign tumors"*
	Diagnostic accuracy	The overall ability of the device to correctly differentiate diseased vs healthy individuals, e.g. "*90% accurate"*
	Effectiveness	A general claim of effectiveness, or direct statement about the impact of the device on breast cancer survival or morbidity.
	Risk factor for cancer	The ability of the device to predict the risk of cancer development, e.g. "*A positive test places women at 4 times greater risk of breast cancer..."*
	Technical sensitivity	The level of precision the device is able to measure breast characteristics to, e.g. "*the test is sensitive to 0.01 degrees"*
	Performance with comparator	Reported values of performance when the device is combined with an existing technology, e.g. "*95% accurate when used in combination with ultrasound and mammography*."
Device safety	General	General statement on the safety of the device without further explanation, e.g. "*the device is 100% risk free*"
	No radiation exposure	A statement on whether or not the device emits any form of radiation, e.g. "*no harmful, ionizing radiation"*
	No pain	The device does not inflict physical pain on patients, e.g. "*no pain*"
	Non-invasive	The device is explicitly stated as being non-invasive, involving no contact with the body, e.g. "*100% non-invasive"*
	No compression	The device does not physically compress the breast, e.g. *"no painful squeezing or compression"*
	Technical limitations	What the device is incapable of, or a population it should not be used on, e.g. *"the device does not offer a diagnosis"*
Supporting evidence	Case study	A sample case study involving pictures of normal and abnormal results is referenced or presented as evidence.
	Peer reviewed literature	Peer reviewed articles are referenced or presented as evidence, e.g. *"A recent article published by X has shown…"*
	Conference abstract	A conference abstract is referenced or presented as evidence to support the use of the device for breast imaging.
	Regulatory approval	The device has received approval for use for breast imaging by a recognised regulatory body, e.g. *"TGA approved"*

	Staff qualifications	A claim which explicitly states the qualifications and level of training that staff receive, e.g. *"imaging carried out by qualified technicians"*
	Testimonials	Statements in support of the device which are presented from third parties, e.g. "*I had imaging with X and highly recommend it*"
Target population	All women	The device is advertised explicitly for use as a breast cancer imaging tool suitable for all women, e.g. *"every woman"s responsibility"*
	Young women	The device is specifically advertised for breast imaging in "*young women*", or women under the recommended screening age of 50.
	Children	The device is explicitly advertised as suitable for use as a breast imaging device in children.
	Breast implants	The device is advertised for breast cancer imaging in women with breast implants.
	Women with high breast density	The device is advertised for breast cancer imaging in women with dense breasts.
	Men	The device is can be used for breast cancer imaging in men.
	Women not having a mammogram	The device is advertised for imaging in women who do not like, or do not participate in mammographic imaging.
Application of device	Diagnosis	The device is advertised for use as a tool to detect breast cancer in women who have symptoms of breast disease.
	Adjunct diagnosis	The device is advertised for use as a complementary tool to detect breast cancer in women who have symptoms of breast disease.
	Screening	The device is advertised for use as a tool to detect breast cancer in women who do not have symptoms of breast cancer.
	Adjunct screening	The device is advertised for use as a complementary tool to detect breast cancer in women who do not have symptoms of breast cancer.
	Early detection	The device is used for the detection of breast disease, or early detection of breast disease, but the health status of the target population is not stated, e.g. *"assists in early detection of cancer"*
	Monitor breast health	The device is used as a tool to "*monitor breast health*" or help increase "*breast awareness*".
	Prevention of disease	The device is advertised as a method of preventing breast disease.e.g. *"find out what is going on and prevent it from getting worse"*
	Identifying risk factors for disease	The devicecan determine a patient's risk of developing breast cancer, e.g. "*an abnormal result is a good indication of cancer risk"*