Cancer Care Ontario

Differentiated Thyroid Cancer Diagnosis Pathway Map

Version 2019.09

Disclaimer

The pathway map is intended to be used for informational purposes only. The pathway map is not intended to constitute or be a substitute for medical advice and should not be relied upon in any such regard. Further, all pathway maps are subject to clinical judgment and actual practice patterns may not follow the proposed steps set out in the pathway map. In the situation where the reader is not a healthcare provider, the reader should always consult a healthcare provider if he/she has any questions regarding the information set out in the pathway map. The information in the pathway map does not create a physician-patient relationship between Cancer Care Ontario (CCO) and the reader.

Ontario

Pathway Map Considerations

- Primary care providers play an important role in the cancer journey and should be informed of relevant tests and consultations. Ongoing care with a primary care provider is assumed to be part of the pathway. For patients who do not have a primary care provider, **Health Care Connect,** is a government resource that helps patients find a doctor or nurse practitioner.
- Throughout the pathway map, a shared decision-making model should be implemented to enable and encourage patients to play an active role in the management of their care. For more information see **Person-Centered Care Guideline** .
- Hyperlinks are used throughout the pathway map to provide information about relevant CCO tools, resources and guidance documents, including documents from CCO's Evidence-Based Series (EBS).
- The pathway was developed using ACR-TIRADS guidelines and Atlas for identification of nodules that are followed sonographically and/or require a biopsy. ACR-TIRADS sonographic follow up timelines vary. Corresponding malignancy risk for ACR-TIRADS categories:
  - TR1 (Benign) malignancy risk <2%,
  - TR2 (Not suspicious) malignancy risk <2%,
  - TR3 (Mildly suspicious) malignancy risk <5%,
  - TR4 (Moderately suspicious) malignancy risk 5-20%,
  - TR5 (Highly suspicious) malignancy risk >20%
- For follow up after a biopsy, ACR-TIRADs was limiting therefore ATA guidelines were used to address this matter. The experts of the Thyroid Cancer Pathway Map Working Group and Clinical Thyroid US Template Development Working Group believe the modifications are appropriate for use in Ontario.
- The term 'health care provider', used throughout the pathway, includes primary care providers and specialists, nurse practitioners, endocrinologists and emergency physicians.
- In Ontario, various specialties have taken on an expanded role in the management of differentiated thyroid cancers. Throughout the pathway, specialist referrals imply a physician with specific expertise in that particular aspect of the management of thyroid cancer.

Pathway Map Notes

- Conversion factor for Tg ng/mL to pmol/L: 1 ng/mL Tg = ~1.515 pmol/L
- When measuring Thyroglobulin (Tg), include measurement of Thyroglobulin antibodies as well

References

[1] British Thyroid Association. Guidelines for the management of thyroid cancer. Clinical Endocrinology. 2014 Jul;81 Suppl 1:1-122. doi: 10.1111/cen.12515.
[2] Haugen, B. R., Alexander, E. K., Bible, K. C., Doherty, G. M., Mandel, S. J., Nikiforov, Y. E., Wartofsky, L. (2016, January 1). 2015 American Thyroid Association management guidelines for adult patients with nodules and differentiated thryoid cancer: the American Thyroid Association Guidelines Task Force on Thyroid Nodules and Differentiated Thyroid Cancer. 26(1). doi:10.1089/thy.2015.0020
[3] Tessler, F. N., Middleton, W. D., Grant, E. G., Hoang, J. K., Berland, L. L., Teefey, S. A., Stravros, A. T. (2017). ACR Thyroid Imaging, Reporting and Data. ACR Thyroid Imaging, Reporting and Data System (TI-RADS): White Paper of the ACR TI-RADS Committee, 14(5), 587-595. doi:10.1016/j.jacr.2017.01.046
[4] American College of Radiology. (2015). Thyroid Imaging Reporting & Data System. Retrieved from ACR TI-RADS Atlas

Pathway Map Legend

Colour Guide

- Primary Care
- Palliative Care
- Pathology
- Surgery
- Radiation Oncology
- Medical Oncology
- Radiology
- Multidisciplinary Cancer Conference (MCC)
- Endocrinology
- Nuclear Medicine
- Psychosocial Oncology

Shape Guide

- Intervention
- Decision or assessment point
- Patient (disease) characteristics
- Consultation with specialist
- Exit pathway
- Off-page reference
- Patient/Provider Interaction
- Referral
- Wait time indicator time point

Line Guide

- Required
- Possible

Pathway Map Disclaimer

This pathway map is a resource that provides an overview of the treatment that an individual in the Ontario cancer system may receive.

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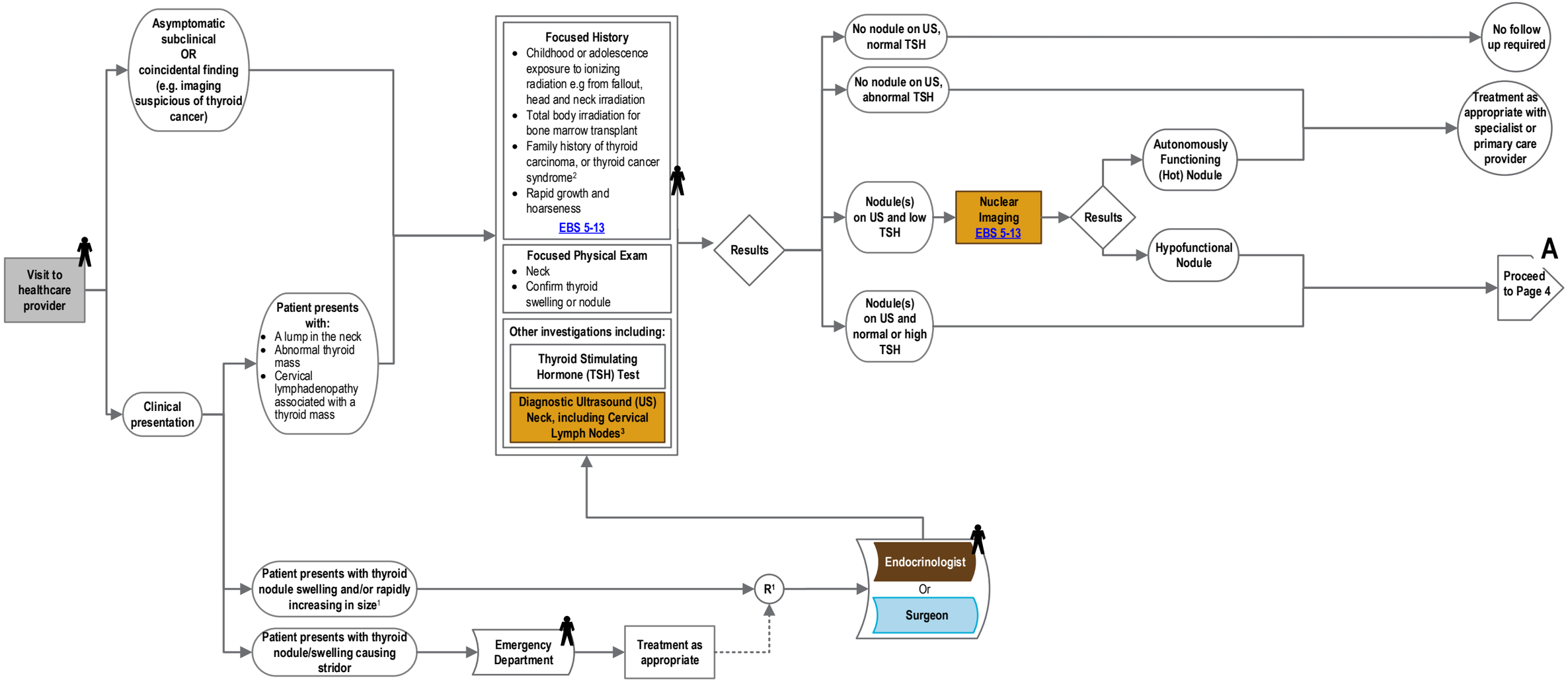
Screen for psychosocial needs, and assessment and management of symptoms. Click here for more information about symptom assessment and management tools



[1] Urgent referral if thyroid swelling presents with any of the following: solitary nodule that is rapidly increasing in size, unexplained hoarseness/voice change, enlarging cervical nodes (Adapted from [Ref 1]). Fine Needle Aspiration (FNA) may be considered in clinic while waiting for imaging appointment.
[2] Family history of thyroid carcinoma, or thyroid cancer syndromes include malignancies related to Cowden's, familial polyposis, Carney complex, multiple endocrine neoplasia 2 (MEN 2), Werner syndrome in a first degree relative.
[3] Synoptic reporting of US results using ACR TIRADS for assessment and recommendation for risk category is strongly recommended. An Ultrasound reporting template has been developed by CCO and is available upon request: Email: disease.pathway.management@cancercare.on.ca

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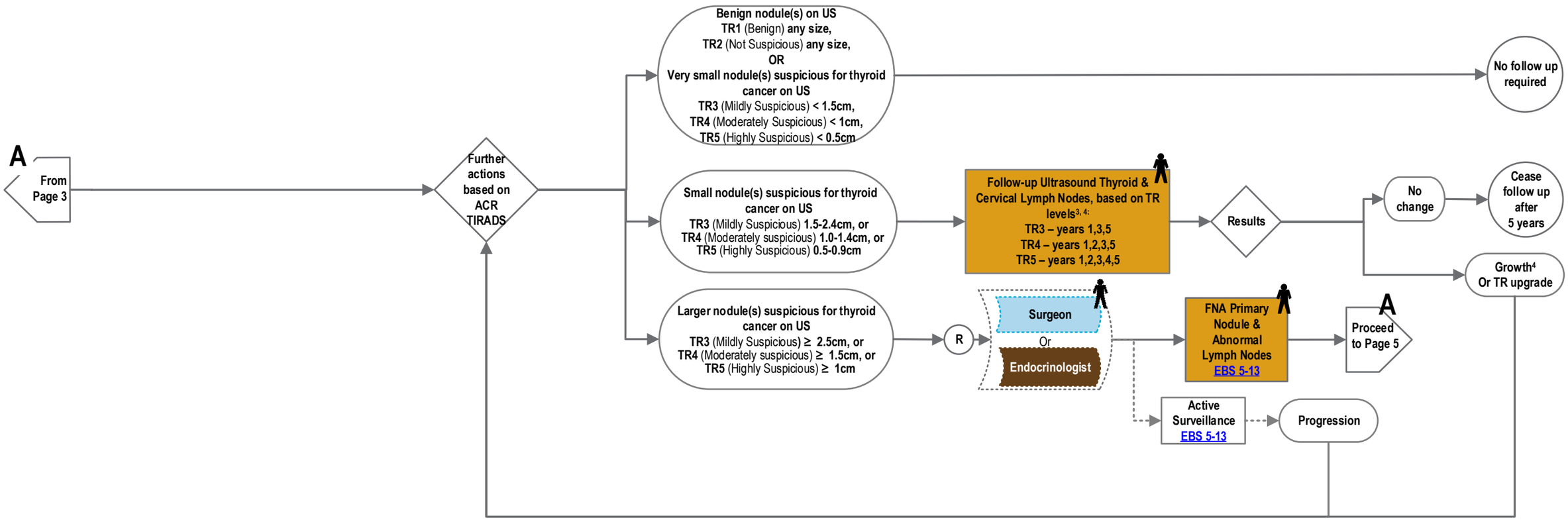

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[4] Growth is defined as 50% increase in volume or 20% increase in each of two linear dimensions compared to oldest previous available ultrasound. Discontinue surveillance after 5 years of no growth.

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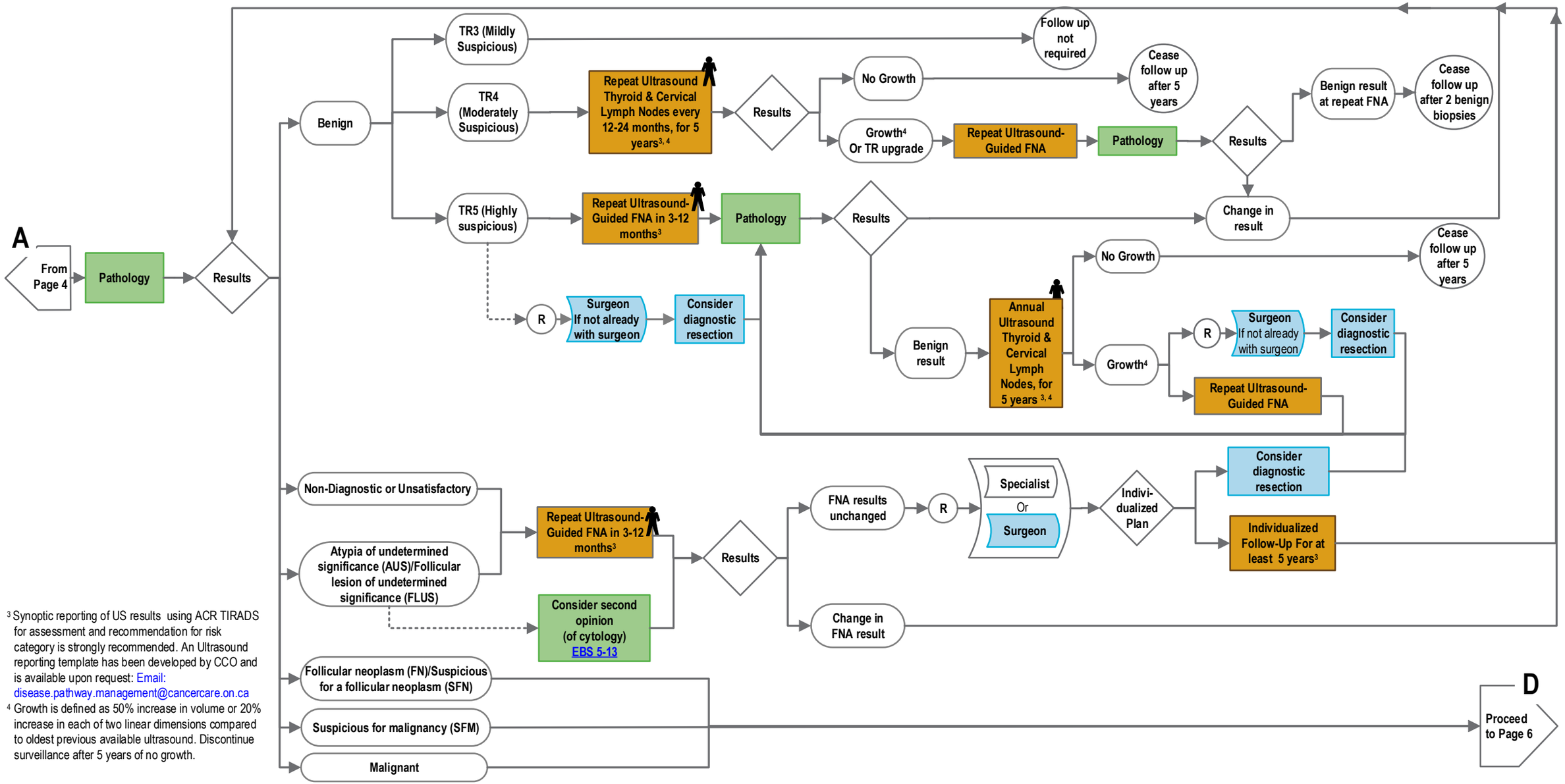

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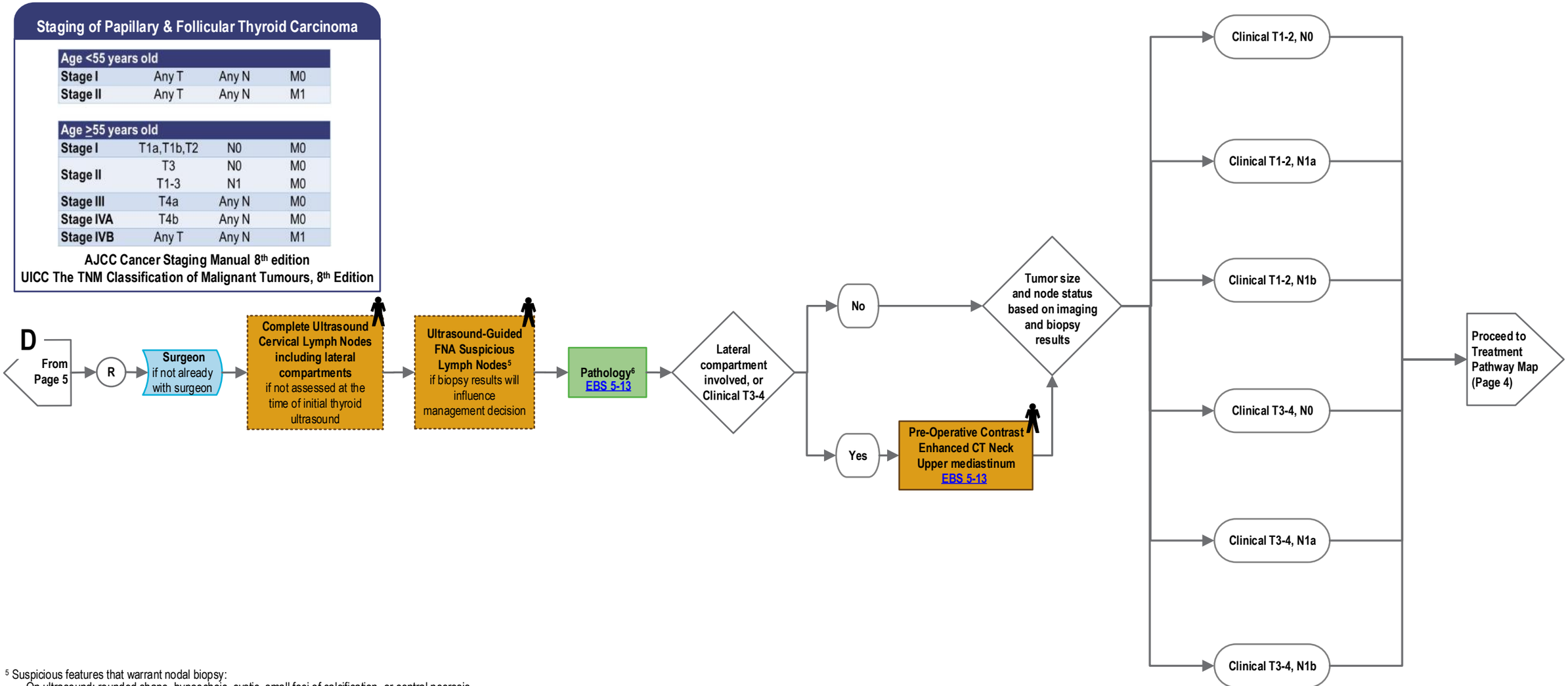
Consider the introduction of palliative care, early and across the cancer journey Click here for more information about palliative care

Staging of Papillary & Follicular Thyroid Carcinoma

Age <55 years old			
Stage I	Any T	Any N	M0
Stage II	Any T	Any N	M1

Age ≥55 years old			
Stage I	T1a,T1b,T2	N0	M0
Stage II	T3	N0	M0
	T1-3	N1	M0
Stage III	T4a	Any N	M0
Stage IVA	T4b	Any N	M0
Stage IVB	Any T	Any N	M1

AJCC Cancer Staging Manual 8th edition
UICC The TNM Classification of Malignant Tumours, 8th Edition



[5] Suspicious features that warrant nodal biopsy:
- On ultrasound: rounded shape, hypoechoic, cystic, small foci of calcification, or central necrosis
- On CT: rounded shape, enhancement, cystic, small foci of calcification, or central necrosis
- Size: size is **only** of consideration if there are suspicious features present, there is no to need to biopsy on size alone. In presence of suspicious features, biopsy is recommended if the shortest dimension in the axial plane is >8mm.

[6] Consider thyroglobulin washout if available.