

Delegation Protocol Number: 216

Delegation Protocol Title:

Endocrine Surgery Pre and Post-Op Lab and Imaging Orders - Adult/Pediatric - Ambulatory

Delegation Protocol Applies To:

All UW Health Endocrine Surgery Clinics

Target Patient Population:

All adult and pediatric patients who are seen at a UW Health Endocrine Surgery Clinic for their pre- and post-op visits.

Delegation Protocol Champion:

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Delegation Protocol Workgroup Members:

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Delegation Protocol Reviewer(s):

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Responsible Department:

Department of Surgery, Endocrine Surgery

Purpose Statement:

To delegate authority from the Endocrine surgery provider to Registered Nurses (RNs) and Medical Assistants (MAs) to order standard Preoperative and Postoperative labs and imaging for patients who are seen at any of the UW Health Endocrine Surgery Clinics for their pre- and post-operative visits in order to increase efficiency and expedite patient care.

Who May Carry Out This Protocol:

RNs and MAs

Guidelines for Implementation:

1. This protocol is initiated when a patient is scheduled for their pre- and post-operative visits at any UW Health Endocrine Surgery Clinic.
2. RNs and MAs will conduct a chart review to identify the need for the ordering of Pre-Op labs and imaging.
3. RNs and MAs will use the Pre-Op Labs and Imaging Guide (Table 1) to determine which orders need to be entered.
 - 3.1. Pre-Op labs and imaging orders will be placed using the OP - Endocrine Pre- and Post-Op Lab and Imaging Orders Delegation Protocol - Adult/Pediatric - Ambulatory Smart Set [8142].
 - 3.2. Unless otherwise specified within Table 1, all Pre-Op labs and imaging are due within 1 day prior to the scheduled surgery date.
4. RNs and MAs will conduct a chart review to identify the need for the ordering of Post-Op labs and imaging.

5. RNs and MAs will use the Post-Op Labs and Imaging Guide (Table 2) to determine which orders need to be entered and will ensure that there are no duplicated orders.
 - 5.1. Post-Op labs and imaging orders will be placed using the OP - Endocrine Pre- and Post-Op Lab and Imaging Orders Delegation Protocol - Adult/Pediatric - Ambulatory Smart Set [8142].
6. Post-Op labs and imaging orders can be placed anytime, but all orders required for the next 6 months must be entered before the patient's first Post-Op appointment.
7. RNs and MAs will associate the Diagnoses listed on the Pathology Report and/or request for Endocrine Surgery Scheduling order, to complete the labs and/or imaging orders.
8. All orders will be signed using the order mode, Cosigned Required, Protocol/ Policy.

Order Mode:

Cosign Required, Protocol/Policy

Reference(s):

1. East Madison Hospital Preop Program – Preoperative Testing Guidelines found on Uconnect
2. UWHC Pass – Suggested Preop Testing Grid found on Uconnect
3. Ross DS, Burch HB, Cooper DS, et al. 2016 American Thyroid Association Guidelines for Diagnosis and Management of Hyperthyroidism and Other Causes of Thyrotoxicosis. *Thyroid*. 2016;26(10):1343-1421. doi:10.1089/thy.2016.0229.
4. Haugen BR, Alexander EK, Bible KC, et al. 2015 American Thyroid Association Management Guidelines for Adult Patients with Thyroid Nodules and Differentiated Thyroid Cancer: The American Thyroid Association Guidelines Task Force on Thyroid Nodules and Differentiated Thyroid Cancer. *Thyroid*. 2016;26(1):1-133. doi:10.1089/thy.2015.0020.
5. Francis GL, Waguespack SG, Bauer AJ, et al. Management Guidelines for Children with Thyroid Nodules and Differentiated Thyroid Cancer. *Thyroid*. 2015;25(7):716-759. doi:10.1089/thy.2014.0460.
6. Wells SA, Asa SL, Dralle H, et al. Revised American Thyroid Association Guidelines for the Management of Medullary Thyroid Carcinoma. *Thyroid*. 2015;25(6):567-610. doi:10.1089/thy.2014.0335.
7. Lenders JWM, Duh Q-Y, Eisenhofer G, et al. Pheochromocytoma and Paraganglioma: An Endocrine Society Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism*. 2014;99(6):1915-1942. doi:10.1210/jc.2014-1498.
8. Funder JW, Carey RM, Mantero F, et al. The Management of Primary Aldosteronism: Case Detection, Diagnosis, and Treatment: An Endocrine Society Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism*. 2016;101(5):1889-1916. doi:10.1210/jc.2015-4061.
9. Wilhelm SM, Wang TS, Ruan DT, et al. The American Association of Endocrine Surgeons Guidelines for Definitive Management of Primary Hyperparathyroidism. *JAMA Surgery*. 2016;151(10):959. doi:10.1001/jamasurg.2016.2310.

Collateral Documents/Tool(s):

1. Pre-Op Labs and Imaging Guide (Table 1)
2. Post-Op Labs and Imaging Guide (Table 2)
3. OP - Endocrine Pre-TAC and Post-Op Lab and Imaging Orders Delegation Protocol - Adult/Pediatric - Ambulatory Smart Set [8142]

Approved By:

UW Health Ambulatory Protocol Committee: October 2019

UW Health Clinical Knowledge Management Council: October 2019

UWHC Medical Board: November 2019

UW Health Chief Clinical Officer: November 2019

UWHealth

Table 1: Pre-Op Labs and Imaging Guide

PARATHYROID		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Parathyroidectomy (with or without) Parathyroid Autotransplant <p style="text-align: center;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Hyperparathyroidism ○ Hyperparathyroidism - Primary ○ Hyperparathyroidism - Secondary ○ Hyperparathyroidism - Tertiary ○ Hypercalcemia ○ Vitamin D Deficiency 	<ul style="list-style-type: none"> • Calcium [CA] • Creatinine [CRET] • PTH [PTH] • Vitamin D, 25 Hydroxy (Vitamin D Status [VITD]) <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Vitamin D, 25 Hydroxy by HPLC [HCLCD25] 	<ul style="list-style-type: none"> • All: Unless obtained within the last 3 Months • ONLY for Patients on Ergocalciferol, Vit 2.
<ul style="list-style-type: none"> • Parathyroid Autotransplant ONLY 	<ul style="list-style-type: none"> • NONE 	<ul style="list-style-type: none"> • N/A

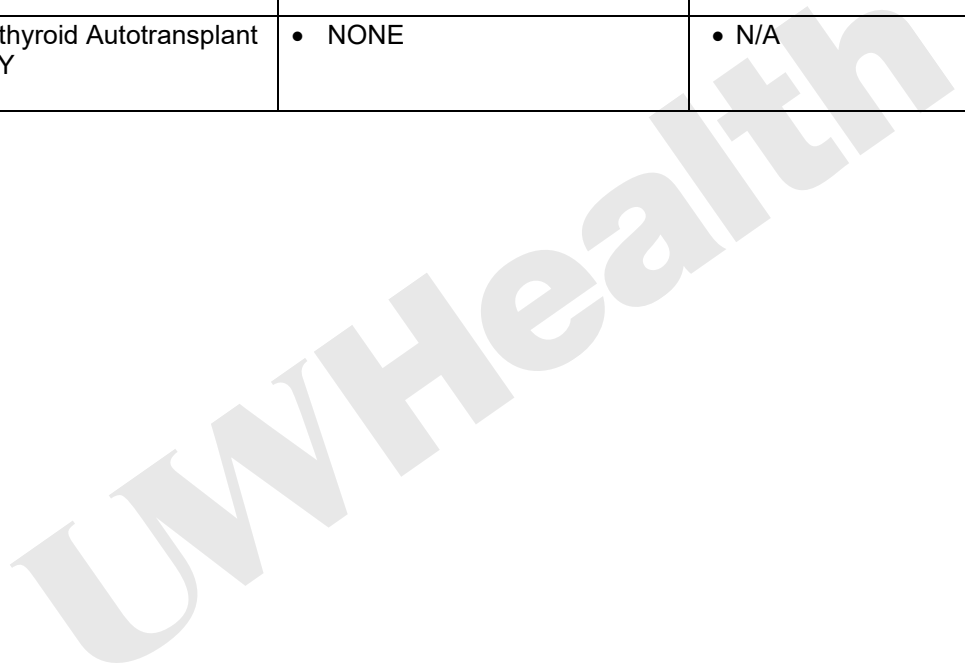


Table 1: Pre-Op Labs and Imaging Guide (continued)

THYROID		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Total Thyroidectomy • Thyroid Lobectomy • Completion Thyroidectomy <p style="margin-left: 20px;">Fine Needle Aspiration Pathology Showed:</p> <ul style="list-style-type: none"> ○ Atypia of Undetermined Significance (AUS) ○ Atypical Fine Needle Aspiration (AFNA) ○ Follicular Lesion of Undetermined Significance (FLUS) ○ Follicular Neoplasm ○ Hurthle Cell Neoplasm ○ Non-Diagnostic Fine Needle Aspiration <p style="margin-left: 20px;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Anaplastic Thyroid Carcinoma ○ Goiter ○ Multinodular Goiter ○ Hashimotos ○ Lymphocytic Thyroiditis ○ Medullary Thyroid Cancer ○ Multiple Thyroid Nodules ○ Thyroglossal Duct Cyst ○ Thyroiditis ○ Thyroid Nodule ○ Vitamin D Deficiency 	<ul style="list-style-type: none"> • Calcium [CA] • Free T4 [FT4] • PTH [PTH] • TSH [TSH] 	<ul style="list-style-type: none"> • All: Unless obtained within the last 3 Months
<ul style="list-style-type: none"> • Total Thyroidectomy • Thyroid Lobectomy • Completion Thyroidectomy <p style="margin-left: 20px;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Graves Disease ○ Hyperthyroidism ○ Toxic Nodule ○ Vitamin D Deficiency 	<ul style="list-style-type: none"> • Calcium [CA] • Free T3 [FT3] • Free T4 [FT4] • Parathyroid Hormone [PTH] • Thyroid-Stimulating Hormone [TSH] • Vitamin D, 25 Hydroxy (Vitamin D Status [VITD]) <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Vitamin D, 25 Hydroxy by HPLC [HCLCD25] 	<ul style="list-style-type: none"> • FT3, FT4, TSH: Unless obtained within the last 2 Weeks • Calcium, PTH, Vitamin D, 25 Hydroxy: Unless obtained within the last 3 months • ONLY for Patients on Ergocalciferol, Vit 2.

Table 1: Pre-Op Labs and Imaging Guide (continued)

THYROID		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Total Thyroidectomy • Thyroid Lobectomy • Completion Thyroidectomy ○ Fine Needle Aspiration Pathology Showed: <ul style="list-style-type: none"> Papillary Thyroid Cancer ○ Suspicious for Papillary Thyroid Cancer <p style="text-align: center;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Papillary Thyroid Cancer ○ Thyroid Nodule ○ Vitamin D. Deficiency 	<ul style="list-style-type: none"> • Calcium [CA] • Free T4 [FT4] • Parathyroid Hormone [PTH] • Thyroglobulin with Reflex to LC-MS/MS OR CIA (Includes Thyroglobulin AB) [THYROG] • Thyroid-Stimulating Hormone [TSH] <hr style="border-top: 1px dashed black;"/> <ul style="list-style-type: none"> • Thyroglobulin Antibody [XATHYG] 	<ul style="list-style-type: none"> • All: Unless obtained within the last 3 Months <p><u>Note:</u> If Completion Thyroidectomy is less than 3 months status post Thyroid Lobectomy, labs are required to be completed.</p> <hr style="border-top: 1px dashed black;"/> <ul style="list-style-type: none"> • Additional lab order - ONLY for labs that are drawn at an outside facility
<ul style="list-style-type: none"> • Central Neck Dissection • Modified Radical Neck Dissection • Neck Dissection <p style="text-align: center;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Hurthle Cell Cancer ○ Medullary Carcinoma of Thyroid ○ Papillary Thyroid Cancer ○ Thyroid Cancer 	<ul style="list-style-type: none"> • Calcium [CA] • Parathyroid Hormone [PTH] 	<ul style="list-style-type: none"> • All: Unless obtained within the last 3 Months

ADRENAL		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Adrenalectomy • Carcinoid Tumors <p style="text-align: center;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Adrenal Mass ○ Cushing's Syndrome ○ Hyperaldosteronism ○ Paraganglioma ○ Pheochromocytoma 	<ul style="list-style-type: none"> • Blood Urea Nitrogen [BUN] • CBC with Differential [CBC] • Creatinine [CRET] • Electrolytes [LYTE] • Antibody Screen [ABSCR] <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Extended Type and Screen [ETS] 	<ul style="list-style-type: none"> • All: Unless obtained within the last 2 Weeks • Antibody Screen to be ordered if surgery is > 30 days out • Extended Type and Screen to be ordered if surgery is within the next 30 days • Extended Type and Screen must be drawn at a UW Health Lab

Table 1: Pre-Op Labs and Imaging Guide (continued)

ADDITIONAL ORDERS		
Indication	Orders	Comments
<ul style="list-style-type: none"> • RHEUMATOID Arthritis • Down Syndrome <p style="margin-left: 40px;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Down Syndrome ○ Rheumatoid Arthritis ○ Pre-Op Testing 	<ul style="list-style-type: none"> • X-Ray Cervical Spine 2-3 Views [ABSCR] 	<ul style="list-style-type: none"> • Not required for other arthritic types. • Unless obtained within the last year.



Table 2: Post-Op Labs and Imaging Guide

PARATHYROID		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Parathyroidectomy <p>Diagnosis:</p> <ul style="list-style-type: none"> ○ Hyperparathyroidism ○ Hyperparathyroidism Primary ○ Hyperparathyroidism Secondary ○ Hyperparathyroidism Tertiary ○ S/P Parathyroidectomy 	<ul style="list-style-type: none"> • Calcium [CA] • Parathyroid Hormone [PTH] 	<ul style="list-style-type: none"> • All: Due within 1 Week • All: Due <u>again</u> in 6 Months
<ul style="list-style-type: none"> • Parathyroid Autotransplant <p>Diagnosis:</p> <ul style="list-style-type: none"> ○ Hyperparathyroidism ○ Hyperparathyroidism Primary ○ Hyperparathyroidism Secondary ○ Hyperparathyroidism Tertiary ○ S/P Parathyroidectomy 	<ul style="list-style-type: none"> • Calcium [CA] • Parathyroid Hormone [PTH] 	<ul style="list-style-type: none"> • All: Due within 1 Week
<ul style="list-style-type: none"> • Postoperative Hypercalcemia following Parathyroidectomy <p>Diagnosis:</p> <ul style="list-style-type: none"> ○ Hyperparathyroidism ○ Hyperparathyroidism Primary ○ Hyperparathyroidism Secondary ○ Hyperparathyroidism Tertiary ○ S/P Parathyroidectomy 	<ul style="list-style-type: none"> • Calcium [CA] • Parathyroid Hormone [PTH] 	<ul style="list-style-type: none"> • All: Due in 2-3 Weeks

Table 2: Post-Op Labs and Imaging Guide (continued)

PAPILLARY, FOLLICULAR, HURTHLE CELL THYROID CANCER, NIFTP PATHOLOGIES		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Completion Thyroidectomy • Thyroid Lobectomy (If history of previous thyroid surgery) • Total Thyroidectomy <p style="text-align: center;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Papillary Thyroid Cancer ○ S/P Partial thyroidectomy ○ S/P Total Thyroidectomy ○ Follicular Thyroid Cancer ○ Hurthle Cell Carcinoma ○ Noninvasive Follicular Thyroid Neoplasms with Papillary-like Nuclear features (NIFTP) 	<ul style="list-style-type: none"> • Calcium [CA] • Parathyroid Hormone [PTH] 	<ul style="list-style-type: none"> • All: Due within 1 Week
	<ul style="list-style-type: none"> • Thyroid-Stimulating Hormone [TSH] • Thyroglobulin with Reflex to LC-MS/MS OR CIA (Includes Thyroglobulin AB) [THYROG] 	<ul style="list-style-type: none"> • All: Due in 6-8 Weeks • All: Due <u>again</u> in 6 Months
	<ul style="list-style-type: none"> • Thyroglobulin Antibody [XATHYG] 	<ul style="list-style-type: none"> • Additional lab order - ONLY for labs that are drawn at an outside facility
	<ul style="list-style-type: none"> • Thyroid/Neck Ultrasound 	<ul style="list-style-type: none"> • Due in 6 Months

PAPILLARY, FOLLICULAR, HURTHLE CELL THYROID CANCER, NIFTP PATHOLOGIES - LOBECTOMY		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Thyroid Lobectomy <p style="text-align: center;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Papillary Thyroid Cancer ○ S/P Partial thyroidectomy ○ S/P Total Thyroidectomy ○ Follicular Thyroid Cancer ○ Hurthle Cell Carcinoma ○ Noninvasive Follicular Thyroid Neoplasms with Papillary-like Nuclear features (NIFTP) 	<ul style="list-style-type: none"> • Thyroid-Stimulating Hormone [TSH] • Thyroglobulin with Reflex to LC-MS/MS OR CIA (Includes Thyroglobulin AB) [THYROG] 	<ul style="list-style-type: none"> • All: Due in 6-8 Weeks • All: Due <u>again</u> in 6 Months
	<ul style="list-style-type: none"> • Thyroglobulin Antibody [XATHYG] 	<ul style="list-style-type: none"> • Additional lab order - ONLY for labs that are drawn at an outside facility
	<ul style="list-style-type: none"> • Thyroid/Neck Ultrasound 	<ul style="list-style-type: none"> • Due in 6 Months

Table 2: Post-Op Labs and Imaging Guide (continued)

BENIGN & OTHER THYROID CANCER LOBECTOMY		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Thyroid Lobectomy <p style="text-align: center;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Anaplastic Thyroid Carcinoma ○ Goiter ○ Multinodular Goiter ○ Hashimotos ○ Lymphocytic Thyroiditis ○ Medullary Thyroid Cancer ○ Multiple Thyroid Nodules ○ S/P Partial thyroidectomy ○ S/P Total Thyroidectomy ○ Lymphoma of Thyroid Gland ○ Thyroiditis ○ Thyroid Nodule 	<ul style="list-style-type: none"> • Thyroid-Stimulating Hormone [TSH] 	<ul style="list-style-type: none"> • Due in 6-8 Weeks

BENIGN & OTHER THYROID CANCER TOTAL		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Completion Thyroidectomy • Thyroid Lobectomy (If history of previous thyroid surgery) • Total Thyroidectomy <p style="text-align: center;">Diagnosis:</p> <ul style="list-style-type: none"> ○ Anaplastic Thyroid Carcinoma ○ Goiter ○ Multinodular Goiter ○ Hashimotos ○ Lymphocytic Thyroiditis ○ Medullary Thyroid Cancer ○ Multiple Thyroid Nodules ○ S/P Partial thyroidectomy ○ S/P Total Thyroidectomy ○ Lymphoma of Thyroid Gland ○ Thyroiditis ○ Thyroid Nodule 	<ul style="list-style-type: none"> • Calcium [CA] • Parathyroid Hormone [PTH] <hr style="border-top: 1px dashed black;"/> <ul style="list-style-type: none"> • Thyroid-Stimulating Hormone [TSH] 	<ul style="list-style-type: none"> • All: Due within 1 Week <hr style="border-top: 1px dashed black;"/> <ul style="list-style-type: none"> • Due in 6-8 Weeks

Table 2: Post-Op Labs and Imaging Guide (continued)

GRAVES PATHOLOGY		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Completion Thyroidectomy • Thyroid Lobectomy (If history of previous thyroid surgery) • Total Thyroidectomy <p>Diagnosis:</p> <ul style="list-style-type: none"> ○ Graves Disease 	<ul style="list-style-type: none"> • Calcium [CA] • Parathyroid Hormone [PTH] 	<ul style="list-style-type: none"> • All: Due within 1 Week
	<ul style="list-style-type: none"> • Free T4 [FT4] • Thyroid-Stimulating Hormone [TSH] 	<ul style="list-style-type: none"> • All: Due in 6-8 Weeks
<ul style="list-style-type: none"> • Thyroid Lobectomy <p>Diagnosis:</p> <ul style="list-style-type: none"> ○ Graves Disease 	<ul style="list-style-type: none"> • Free T4 [FT4] • Thyroid-Stimulating Hormone [TSH] 	<ul style="list-style-type: none"> • All: Due in 6-8 Weeks

CENTRAL NECK & MODIFIED RADICAL NECK DISSECTION		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Central Neck Dissection ONLY • Modified Radical Neck Dissection <p>Diagnosis:</p> <ul style="list-style-type: none"> ○ Anaplastic Thyroid Carcinoma ○ Follicular Thyroid Cancer ○ Hurthle Cell Carcinoma ○ Medullary Thyroid Cancer ○ Papillary Thyroid Cancer ○ Lymphoma of Thyroid Gland ○ S/p neck dissection 	<ul style="list-style-type: none"> • Calcium [CA] • Parathyroid Hormone [PTH] 	<ul style="list-style-type: none"> • All: Due within 1 Week

ADRENAL		
Indication	Orders	Comments
<ul style="list-style-type: none"> • Adrenalectomy <p>Diagnosis:</p> <ul style="list-style-type: none"> ○ Pheochromocytoma 	<ul style="list-style-type: none"> • Metanephrines, Free [HCPMTNP] 	<ul style="list-style-type: none"> • Due in 6 Months
<ul style="list-style-type: none"> • Adrenalectomy <p>Diagnosis:</p> <ul style="list-style-type: none"> ○ Hyperaldosteronism 	<ul style="list-style-type: none"> • Aldosterone [XALDST] • Renin Activity [XRENAC] 	<ul style="list-style-type: none"> • Due: in 3 Months
	<ul style="list-style-type: none"> • Potassium [K] 	<ul style="list-style-type: none"> • Due within 1 Week