

## Intermediate Steps

- ☒ ip\_op\_variables
- ☒ rule\_surveillance
- ☒ rule\_treatment\_navigation
- ☒ scoring
- ☒ admissions

- **ip\_op\_variables:**
  - **medical\_claims\_filtered** = `_filter_op_ip_claims(medical_claims, cut_off_date)`
  - **ip\_op\_claims\_long** = `transform_medical_claims(medical_claims_filtered, dx_cat_list, dx_stage_list)`
  - **ip\_op\_claims\_flagged** = `_create_flags_ip_op(ip_op_claims_long, dxcat_assignment, dxcat_significance, venipuncture_codes, svscat_excl)`
  - **ip\_op\_df** = `_create_ip_op_variables(ip_op_claims_flagged, cut_off_date)`
  - **final\_ip\_op\_var** = `_calculate_ip_op_final(patient_id_list, ip_op_df)`
- **rule\_surveillance:** `medical_claims, dx_cat_list, dx_stage_list, venipuncture_codes, svscat_excl, hcpcxwalkgrp, cut_off_date, general_active_dxcat, general_active_procgrp, specific_active_cancer, admission_data, surveillance_drg, pharmacy_claims, active_chemo_ndcnum, chronic_chemo_ndcnum`
  - **medical\_claims\_procgrp** = `_pre_process_surveillance(medical_claims=medical_claims, dx_cat_list=dx_cat_list, dx_stage_list=dx_stage_list, venipuncture_codes=venipuncture_codes, svscat_excl=svscat_excl, hcpcxwalkgrp=hcpcxwalkgrp, cut_off_date=cut_off_date)`
  - **claims\_procgrp\_join** = `_general_active_flag(medical_claims_procgrp=medical_claims_procgrp, general_active_dxcat=general_active_dxcat, general_active_procgrp=general_active_procgrp)`
  - **criteria1** = `_general_cancer_surveillance_criteria1(claims_procgrp_join=claims_procgrp_join)`
  - **criteria2** = `_specific_cancer_surveillance_criteria2(medical_claims_procgrp=medical_claims_procgrp, specific_active_cancer=specific_active_cancer)`
  - **criteria3** = `_drg_surveillance_criteria3(admission_data=admission_data, surveillance_drg=surveillance_drg, cut_off_date=cut_off_date)`
  - **criteria4** = `_active_chemo_surveillance_criteria4(`

- pharmacy\_claims=pharmacy\_claims,
    - active\_chemo\_ndcnum=active\_chemo\_ndcnum,
    - cut\_off\_date=cut\_off\_date)
  - **criteria5** = \_chronic\_chemo\_surveillance\_criteria5(
    - pharmacy\_claims=pharmacy\_claims,
    - chronic\_chemo\_ndcnum=chronic\_chemo\_ndcnum,
    - cut\_off\_date=cut\_off\_date)
  - **surveillance\_final** = \_get\_surveillance\_df(
    - criteria1=criteria1,
    - criteria2=criteria2,
    - criteria3=criteria3,
    - criteria4=criteria4,
    - criteria5=criteria5)
- **rule\_treatment\_navigation**: medical\_claims, dx\_cat\_list, dx\_stage\_list, venipuncture\_codes, svcsclat\_excl, cut\_off\_date, treatment\_navigation\_dx
  - **medical\_claims\_filtered** = \_pre\_process\_treatment\_navigation(medical\_claims, dx\_cat\_list, dx\_stage\_list, venipuncture\_codes, svcsclat\_excl, cut\_off\_date)
  - **medical\_claims\_rules** = \_treatment\_navigation\_day\_flag(
    - medical\_claims\_filtered, treatment\_navigation\_dx, cut\_off\_date)
  - **medical\_claims\_rules\_stg\_flagged** = \_tr\_nav\_max\_stage(
    - medical\_claims\_rules, treatment\_navigation\_dx)
  - **tr\_nav\_df** = \_create\_tr\_nav\_variable(medical\_claims\_rules\_stg\_flagged)
- **scoring**: dt\_output, trnav\_output, rebalance\_output, surveillance\_output, neonates\_output, popclass\_description
  - **all\_rules** = \_get\_all\_rules\_from\_dtwrules(
    - dt\_output=dt\_output,
    - trnav\_output=trnav\_output,
    - rebalance\_output=rebalance\_output,
    - surveillance\_output=surveillance\_output,
    - neonates\_output=neonates\_output)
  - **final\_score** = \_get\_final\_score(all\_rules=all\_rules)
  - **final\_output** = \_get\_final\_popclass\_description(
    - final\_score=final\_score,
    - popclass\_description=popclass\_description)
- **admission\_variables**: admission\_data, cut\_off\_date, patient\_id\_list
  - **admission\_var\_file** = \_create\_admission\_variables(admission\_data, cut\_off\_date)
  - **final\_output** = \_admission\_scoring\_final(patient\_id\_list, admission\_var\_file)