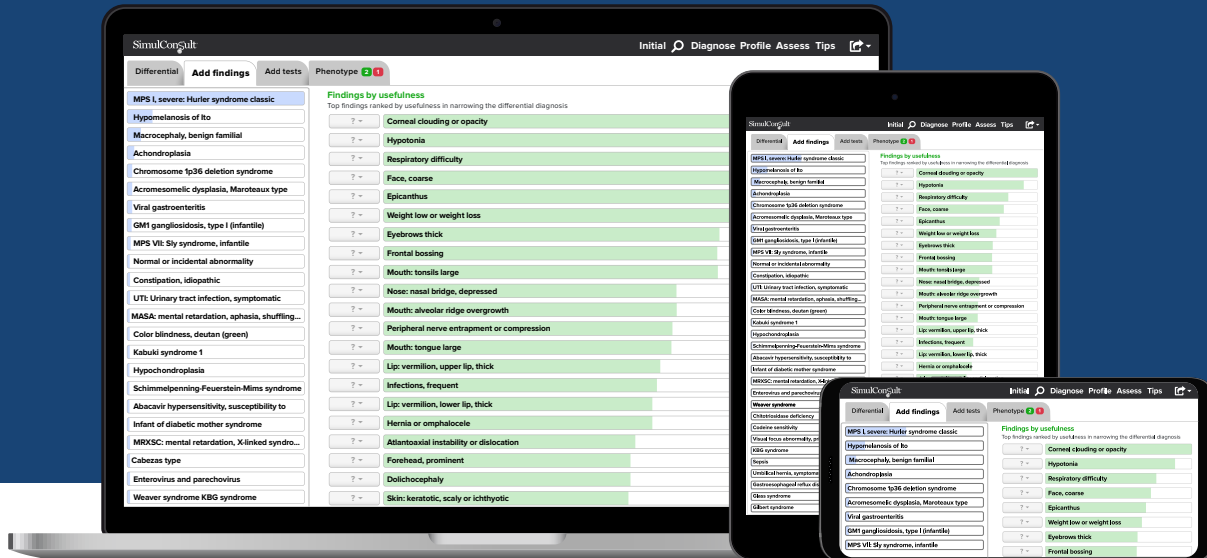


EHR-Integrated Phenome Analyzer

Saves you **even more** time in diagnosis



Now reads your note and recognizes findings

Coverage

Covers >8,900 common and uncommon diseases, including all chromosomal abnormalities and genes with germline changes convincingly associated with human disease and their clinical & lab findings.

Clear logic

You assess the rationale of the fit between your patient and the disease. It achieves “explainable artificial intelligence” using a human-curated database, it is not a black box.

Platform

Runs on mobile devices as well as computers, so you can use it whenever you need it. Easy access from the patient record.

Focused on your patient

Use your patient's pertinent positive and negative findings to generate a differential diagnosis and get suggestions on useful clinical findings to add and tests to order.

Accurate

Reduces diagnostic errors by up to 75%, and helps you consider both the diseases you expect together with other diseases appropriate to consider for your patient. Help advanced practice professionals practice “at the top of their license”

Fast

Now it reads and interprets medical notes instantly. Get a simultaneous consult in seconds. Real-time draft SOAP notes and prep for laboratory orders. Minimize duplication - start from where left off.

SimulConsult®

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Getting to the diagnosis

SimulConsult Diagnosis

New

Start a new diagnosis session

Previous saved diagnosis summaries

Oct 13, 2023, 10:15:48 AM	Dr. Albertine Orm	Open
Oct 13, 2023, 10:14:57 AM	Dr. Albertine Orm	Open

- From the patient chart, start a new SimulConsult session or a previously saved session

Differential

Add findings

Add tests

Phenotype 0 0

All findings (usefulness rank)

Flagged (usefulness rank)

Flagged (rarity rank)

Presence 1

Findings 1

? -

Bradykinesia

? -

Tremors of limbs, trunk or head

Present, recent onset (4.5-8 months)

Present, known onset earlier @ >

Present, noticed earlier by (±) >

Present, unknown onset (✓)

Absent (X)

Not specified

- Use the Natural Language Processing (NLP) engine to extract the already known “flagged” findings from the chart, shown here with the referral note.
- Review the findings and then use the pulldown menu to comment on absence or presence and onset, for the relevant findings

Differential

Add findings

Add tests

Phenotype 2 0

All findings (usefulness rank)

Flagged (usefulness rank)

Flagged (rarity rank)

Presence 1

Findings 1

Parkinson disease, idiopathic

Dementia with Lewy bodies

Progressive supranuclear pa...

Tardive dyskinesia

Corticobasal degeneration

FTD: frontotemporal dement...

NPH: Normal pressure hydro...

PARK8: LRRK2-related Parki...

FXTAS: fragile X-associated ...

Alzheimer disease 2, APOE-...

? -

L-DOPA response good

? -

Modifier: Unilateral location or asymmetry

? -

Blinking reduced

? -

Micrographia

? -

Neuroleptics, adverse reaction, acute

? -

Face, expressionless

? -

Modifier: Rigidity character to hypertonia

? -

Posture stooped

- During the visit, add findings based on Usefulness.
- The display of useful findings recalculates with the evolving differential diagnosis.

- Add findings. Prompts you to add the most useful clinical findings relevant to your patient
- Add tests. Prompts you to add the most useful test results relevant to your patient

Differential diagnosis with 3 positive findings: “tremors, bradykinesia, expressionless face”

Differential

Add findings

Add tests

Phenotype 3 0

Diseases ranked by probability

Parkinson disease, idiopathic

* Dementia with Lewy bodies

PARK8: LRRK2-related Parkinson disease, AD

PARK18: EIF4G1-related Parkinson disease, AD

Alzheimer disease 2, APOE-related

PARK1: SNCA-related Parkinson disease, AD

Differential diagnosis with the addition of 1 pertinent negative “asymmetry”

Differential

Add findings

Add tests

Phenotype 3 1

Diseases ranked by probability

* Dementia with Lewy bodies

Parkinson disease, idiopathic

PARK8: LRRK2-related Parkinson disease, AD

Alzheimer disease 2, APOE-related

Alzheimer disease 1, APP-related

PARK18: EIF4G1-related Parkinson disease, AD

Save time entering findings with Workups by specialty or problem

- Green shading prompts you for the most useful findings

Add findings from workup lists for **Problem** ☐ **Specialty** ☒

☐ Abdominal pain ☐ Attention deficit ☐ Autism ☐ Child abuse ☐ Coma ☐ Dementia ☐ Developmental Delay ☐ Failure to Thrive ☐ Headache ☐ Hypoglycemia ☐ Hypotonia ☒ Macrocephaly ☐ Microcephaly ☐ Psychosis

☐ Seizure ☐ Stature short ☐ Urinary incontinence

Presence ☒ Findings in the workup list

<input type="radio"/> Ataxia	Bundle <input type="radio"/>	Head CT scan	<input type="radio"/> Lethargy, malaise, fatigue	<input type="radio"/> Seizures
<input type="radio"/> Autistic behavior	Bundle <input type="radio"/>	Head MRI scan	Bundle <input type="radio"/>	<input type="radio"/> Skin: hyperpigmented lesions
<input type="radio"/> Bruit over large artery	<input type="radio"/>	<input type="radio"/> Hemangiomas in skin, reddish	Recent <input type="radio"/>	<input type="radio"/> Skin: hypopigmented lesions
Bundle <input type="radio"/>	<input type="radio"/>	<input type="radio"/> Hepatomegaly	<input type="radio"/>	Bundle <input type="radio"/>
Bundle <input type="radio"/>	<input type="radio"/>	<input type="radio"/> History of a similar disorder in family or co...	<input type="radio"/>	<input checked="" type="radio"/> Stature short
<input checked="" type="radio"/> Corneal clouding or opacity	<input type="radio"/>	<input type="radio"/> Hyperreflexia	<input type="radio"/>	<input type="radio"/> Stature tall
<input type="radio"/> Dystonia	<input type="radio"/>	<input type="radio"/> Hypertonia / stiffness	<input type="radio"/>	<input type="radio"/> Trauma history, physical, recent, near sym...
<input type="radio"/> Eye movement deficit (strabismus included)	<input type="radio"/>	<input type="radio"/> Hyporeflexia	Bundle <input type="radio"/>	<input type="radio"/> Upper/lower segment ratio high
<input type="radio"/> Face, coarse features	<input type="radio"/>	<input type="radio"/> Hypotonia	<input type="radio"/>	<input type="radio"/> Upper/lower segment ratio low
<input type="radio"/> Fontanelles large	<input type="radio"/>	<input type="radio"/> Intellectual / cognitive disability (speech d...	<input type="radio"/>	<input type="radio"/> Visual impairment
<input type="radio"/> Frontal bossing	<input type="radio"/>	<input type="radio"/> Irritability or agitation, pronounced	<input type="radio"/>	<input type="radio"/> Vomiting, frequent or severe
<input type="radio"/> Gait disturbance	Recent <input type="radio"/>	<input type="radio"/> Kyphosis without scoliosis	<input type="radio"/>	<input type="radio"/> Weight high or weight gain

Highest usefulness ↑

Save even more time with real-time dictation as input to the evolving differential diagnosis, without risking quality

Flagged Findings generator

Use Natural Language Processing of your text to flag the findings recognized. Adding more text later combines their information. Although the text is processed on the server, your information is not retained.

The patient has recently developed tremors, and slow movements. According to his wife, he has recently begun acting out his dreams. There is a loss of facial expression.

Load & go to Dx

Clear

Recent ☐

The finding:

Bradykinesia

was flagged in the following context:

"The patient has recently developed tremors, and slow movements. According to his wife, he has recently begun acting out his dreams."

Recent ☐

Un-flag

- Add your dictation. Use the Flagged Finding Generator, accessed from the flag on the nav bar or an API.
- The **Flagged Finding Generator** uses natural language processing to read the note and recognize findings.
- Add relevant findings from note to the patient phenotype (and select "all findings shown") to get suggestions for useful findings to add.
- You can **check the mentions** of each finding by clicking on the flag.

Differential

Add findings

Add tests

Phenotype 4 0

* Dementia with Lewy bod...

Parkinson disease, idiop...

Multiple system atrophy

PARK8: LRRK2-related ...

PARK18: EIF4G1-related...

Alzheimer disease 2, AP...

PARK1: SNCA-related Pa...

PARK11: GIGYF2-related...

☐ All findings (usefulness rank) ☒ Flagged (usefulness rank)

☐ Flagged (rarity rank)

Presence ☒

Findings ☒

Recent ☐

Bradykinesia

Recent ☐

REM sleep behavior disorder by history (acts out dreams)

Recent ☐

Face, expressionless

Recent ☐

Tremors of limbs, trunk or head

Maximum usefulness ↑

Assess the logic of the diagnosis to see if you agree

Assessing diagnosis of **Dementia with Lewy bodies**

Patient's phenotype	Frequency in disease
Presence	Pertinent positives
<input checked="" type="checkbox"/> Male sex (phenotypically)	
<input checked="" type="checkbox"/> Recent Bradykinesia	
<input checked="" type="checkbox"/> Recent Tremors of limbs, trunk or head	
<input checked="" type="checkbox"/> Recent REM sleep behavior disorder by history (acts ou...	
<input checked="" type="checkbox"/> Recent Face, expressionless	
Presence	Pertinent negatives
<input checked="" type="checkbox"/> Modifier: Unilateral location or asymmetry	
<input checked="" type="checkbox"/> Early death (untreated)	

100% frequency ↑

- **Assess the diagnosis.** See how well your patient's pertinent positives and negatives (left side) fit with the disease (right side), given their onsets - the logic driving the differential diagnosis.
- **No black box algorithms.** You see the reasoning and you make the diagnosis

Automated draft SOAP standardizes Assessment, computes the pertinent findings, saving you time

SUBJECTIVE and HISTORY This is a 65-year-old man with:	ASSESSMENT This is a 65-year-old man with:
Other history REM sleep behavior disorder by history (acts out dreams), onset at about 60 years old Hallucinations, onset at about 60 years old Alcohol abuse (fetal exposure included), absent	Pertinent positives REM sleep behavior disorder by history (acts out dreams) Face, expressionless Tremors of limbs, trunk or head Bradykinesia
OBJECTIVE	Pertinent negatives Modifier: Unilateral location or asymmetry
Present on physical exam Face, expressionless Tremors of limbs, trunk or head Bradykinesia	Differential Diagnosis Dementia with Lewy bodies Parkinson disease, idiopathic Alzheimer disease 2, APOE-related Alzheimer disease 1, APP-related Alzheimer disease 3, PSEN1-related
Absent on physical exam Modifier: Unilateral location or asymmetry	PLAN
	Findings to assess REM sleep behavior disorder on sleep EEG EEG: slowing, generalized CT or MRI: cerebral cortex atrophy or hypoplasia

- **Bulleted draft SOAP note.** Fast and easy to digest with a computation of the **Pertinent** findings.
- **Paired with Generative AI for draft Prose SOAP note, with no 'hallucinations',** except your patient, of course.
- When combined with real-time dictation it can capture "color" such as the REM sleep behavior disorder by history was "reported by the wife".

Terse clinician prose note

GPT generated from bulleted notes plus real-time dictation

The patient is a 65-year-old male who presents with REM sleep behavior disorder, **as reported by the wife**, expressionless face, tremors of limbs, trunk, or head, and bradykinesia. The assessment of the patient reveals pertinent negatives such as absent Unilateral location or asymmetry.

The differential diagnosis includes five potential conditions, of which the most likely is dementia with Lewy bodies. The others are idiopathic Parkinson's disease, Alzheimer disease 2, APOE-related, Alzheimer disease 1, APP-related, and PARK8: LRRK2-related Parkinson disease, AD.

I have ordered testing for REM sleep behavior disorder through a sleep EEG and a CT or MRI to look for cerebral cortex atrophy or hypoplasia.