











1.1 1.2 1.3 2.1 2.2 2.3

  |     |  |    | Limit to 2000 rows

```
1  -- How many total encounters occurred each year?
2
3  • select
4      year(start) as my_year,
5      count(1) as total_encounters
6  from
7      encounters
8  group by
9      my_year
10 order by
11     my_year
```

Result Grid   Filter Rows: | Export:  | Wrap Cell

	my_year	total_encounters
▶	2011	1336
	2012	2106
	2013	2495
	2014	3885
	2015	2469
	2016	2451
	2017	2360
	2018	2292
	2019	2228
	2020	2519
	2021	3530
	2022	220

1.1 1.2 x 1.3 2.1 2.2 2.3 2.4 3.1 3.2 3.3




```
1  -- For each year, what percentage of all encounters belonged to each encounter class (ambulatory, outpatient, wellness, urgentcare, emergency, and inpatient)?
2
3  • select
4      year(start) as my_year,
5      round((sum(case when encounterclass = "ambulatory" then 1 else 0 end)/count(*)*100), 2) as ambulatory,
6      round((sum(case when encounterclass = "outpatient" then 1 else 0 end)/count(*)*100), 2) as outpatient,
7      round((sum(case when encounterclass = "wellness" then 1 else 0 end)/count(*)*100), 2) as wellness,
8      round((sum(case when encounterclass = "urgentcare" then 1 else 0 end)/count(*)*100), 2) as urgentcare,
9      round((sum(case when encounterclass = "emergency" then 1 else 0 end)/count(*)*100), 2) as emergency,
10     round((sum(case when encounterclass = "inpatient" then 1 else 0 end)/count(*)*100), 2) as inpatient
11 from
12     encounters
13 group by
14     my_year
15 order by
16     my_year
```




Result Grid Filter Rows: Export: Wrap Cell Content:

	my_year	ambulatory	outpatient	wellness	urgentcare	emergency	inpatient
▶	2011	49.93	24.48	13.02	2.25	4.12	6.21
	2012	42.50	21.08	9.12	14.20	8.69	4.42
	2013	44.33	19.44	7.45	14.39	9.02	5.37
	2014	60.26	17.86	4.86	8.42	5.56	3.04
	2015	43.46	20.49	6.93	15.39	9.23	4.50
	2016	43.78	19.62	7.43	13.91	10.20	5.06
	2017	41.82	20.13	7.16	16.31	9.24	5.34
	2018	40.71	20.94	7.59	16.45	10.78	3.53
	2019	37.97	20.47	7.54	17.82	10.19	6.01
	2020	47.32	19.73	6.31	14.49	9.29	2.86
	2021	36.91	40.17	4.39	10.71	6.26	1.56
	2022	55.00	16.82	5.45	12.73	8.18	1.82

1.1 1.2 1.3 x 2.1 2.2 2.3 2.4 3.1 3.2 3.3

          Limit to 2000 rows     

```
1  -- What percentage of encounters were over 24 hours versus under 24 hours?
2
3  • select
4      round(sum(case when timestampdiff(hour, start, stop) >= 24 then 1 else 0 end) / count(1) * 100, 2) as less_than_24,
5      round(sum(case when timestampdiff(hour, start, stop) < 24 then 1 else 0 end) / count(1) * 100, 2) as more_than_24
6  from
7      encounters
```

Result Grid  Filter Rows: Export:  Wrap Cell Content: 

	less_than_24	more_than_24
▶	4.13	95.87

1.1 1.2 1.3 2.1 x 2.2 2.3 2.4 3.1 3.2 3.3

Limit to 2000 rows

```
1  -- How many encounters had zero payer coverage, and what percentage of total encounters does this represent?
2
3  • select
4      round(sum(case when payer_coverage = 0.0 then 1 else 0 end) / count(1) * 100, 1) as zero_coverage_pct
5  from
6      encounters
```

Result Grid Filter Rows: Export: Wrap Cell Content: I A

	zero_coverage_pct
▶	48.7


```

1  -- What are the top 10 most frequent procedures performed and the average base cost for each?
2
3 • select
4     description,
5     count(1) as procedure_count,
6     round(avg(base_cost), 2) as avg_base_cost
7 from
8     procedures
9 group by
10    description
11 order by
12    procedure_count desc
13 limit 10

```

 Result Grid Filter Rows: Export: Wrap Cell Content: Fetch rows:

	description	procedure_count	avg_base_cost
▶	Assessment of health and social care needs (procedure)	4596	431.00
	Hospice care (regime/therapy)	4098	431.00
	Depression screening (procedure)	3614	431.00
	Depression screening using Patient Health Questionnaire Two-Item score (procedure)	3614	431.00
	Assessment of substance use (procedure)	2906	431.00
	Renal dialysis (procedure)	2746	1004.09
	Assessment using Morse Fall Scale (procedure)	2422	431.00
	Assessment of anxiety (procedure)	2288	431.00
	Medication Reconciliation (procedure)	2284	509.12
	Screening for drug abuse (procedure)	1484	431.00

1.1 1.2 1.3 2.1 2.2 2.3 2.4 3.1 3.2 3.3

Limit to 2000 rows

```

1  -- What are the top 10 procedures with the highest average base cost and the number of times they were performed?
2
3  • select
4      description,
5      round(avg(base_cost), 2) as avg_base_cost,
6      count(1) as procedure_count
7  from
8      procedures
9  group by
10     description
11  order by
12     avg_base_cost desc
13  limit 10

```

Result Grid Filter Rows: Export: Wrap Cell Content: Fetch rows:

	description	avg_base_cost	procedure_count
▶	Admit to ICU (procedure)	206260.40	5
	Coronary artery bypass grafting	47085.89	9
	Lumpectomy of breast (procedure)	29353.00	5
	Hemodialysis (procedure)	29299.56	27
	Insertion of biventricular implantable cardioverter defibrillator	27201.00	4
	Electrical cardioversion	25903.11	1383
	Partial resection of colon	25229.29	7
	Fine needle aspiration biopsy of lung (procedure)	23141.00	1
	Percutaneous mechanical thrombectomy of portal vein using fluoroscopic guidance	20228.04	57
	Percutaneous coronary intervention	19728.00	9

```
1  -- What is the average total claim cost for encounters, broken down by payer?
2
3  • select
4      p.name,
5      round(avg(e.total_claim_cost),2) as avg_total_claim_cost
6  from
7      encounters e
8  left join
9      payers p
10     on e.payer = p.id
11  group by
12     p.name
13  order by
14     avg_total_claim_cost desc
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	name	avg_total_claim_cost
▶	Medicaid	6205.22
	NO_INSURANCE	5593.20
	Anthem	4236.81
	Humana	3269.30
	Blue Cross Blue Shield	3245.58
	Cigna Health	2996.95
	UnitedHealthcare	2848.34
	Aetna	2767.05
	Medicare	2167.55
	Dual Eligible	1696.19

```

1  -- How many unique patients were admitted each quarter over time?
2
3  • select
4      concat(cast(year(start) as char), "-", cast(quarter(start) as char)) as year_qtr,
5      count(distinct(patient)) as unique_patients
6  from
7      encounters
8  group by
9      concat(cast(year(start) as char), "-", cast(quarter(start) as char))

```

Result Grid		
Filter Rows:		
Export:		
Wrap Cell Content:		
	year_qtr	unique_patients
▶	2011-1	156
	2011-2	162
	2011-3	155
	2011-4	168
	2012-1	249
	2012-2	261
	2012-3	232
	2012-4	240
	2013-1	243
	2013-2	271
	2013-3	259
	2013-4	242
	2014-1	394
	2014-2	315
	2014-3	272
	2014-4	260
	2015-1	244
	2015-2	259
	2015-3	252
	2015-4	244
	2016-1	237
	2016-2	245
	2016-3	241
	2016-4	258
	2017-1	235
	2017-2	256
	2017-3	234
	2017-4	243
	2018-1	250
	2018-2	256
	2018-3	228

3.2* x 3.3

Limit to 2000 rows

```
1  -- 3.2 How many patients were re-admitted within 30 days of a previous encounter?
2
3  • with cte as (
4      select
5          patient,
6          start,
7          stop,
8          lead(start) over(partition by patient order by start asc) as next_admission
9      from
10         encounters
11     )
12
13     select
14         count(distinct(patient)) as readmissions
15     from
16         cte
17     where
18         datediff(next_admission, stop) < 30
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

readmissions	
771	

3.2* 3.3 x

Limit to 2000 rows

```

1  -- 3.3 Which patients had the most readmissions?
2
3  with cte as (
4      select
5          patient,
6          start,
7          stop,
8          lead(start) over(partition by patient order by start asc) as next_admission
9      from
10         encounters
11 )
12
13 select
14     patient,
15     count(*) as readmission_count
16 from
17     cte
18 where
19     datediff(next_admission, stop) < 30
20 group by
21     patient
22 order by
23     readmission_count desc

```

Result Grid Filter Rows: Export: Wrap Cell Content:

patient	readmission_count
1712d26d-822d-1e3a-2267-0a9dba31d7c8	1376
3de74169-7f67-9304-91d4-757e0f3a14d2	876
5e055638-0dad-dfd5-005d-1e74b6fd29ac	871
3f523789-55f3-bb31-2757-4803ca6a9c2a	442
5dcb295d-92df-a147-ebcc-aa49b6262830	421
442dc617-c7f2-0513-15cd-c35c4efdba73	384
b4ab9ab3-f52a-751e-a990-3bd5654d5870	376
9b8ae606-5059-b3a6-19c7-c812901898bb	347
b4671e80-7e87-9260-ca31-6a9397d465d1	291
ff331e5c-ab16-e218-f39a-63e11de1ed75	280
381e16cd-86c8-d369-cd76-2dd9e0b5faf5	262
dabb67a9-bc4b-bc40-696e-65546a548d39	228
a31f5105-476f-b129-fb9a-514cf45a34ac	218
b17ffd11-c8c2-28aa-0c26-8ddc6bc5957d	207
df607b64-3d5e-5795-1646-edd2ccf55192	194
de60a9e4-1334-6078-c1f1-e5083bb20361	186
6443e813-1b9b-620c-f7de-af77f9d02733	175
c06513da-7f35-b4eb-5bab-28c87ff97a10	173