

@query db patient

chain\_of(with\_elements(load\_postgres\_table(("public", "patient"), ["id"], [Int32])), flatten())



@query db patient{mrn,sex}

```
chain_of(with_elements(load_postgres_table(("public", "patient"), ["id"], [Int32])),
  flatten(),
  with_elements(tuple_of(:mrn => chain_of(load_postgres_table(("public", "patient"), ["mrn"], [String], ["id"]),
    block_cardinality(x1to1),
    with_elements(chain_of(output(), column(1)))),
    :sex => chain_of(load_postgres_table(("public", "patient"), ["sex"], [String], ["id"]),
    block_cardinality(x1to1),
    with_elements(chain_of(output(), column(1)))))))
```

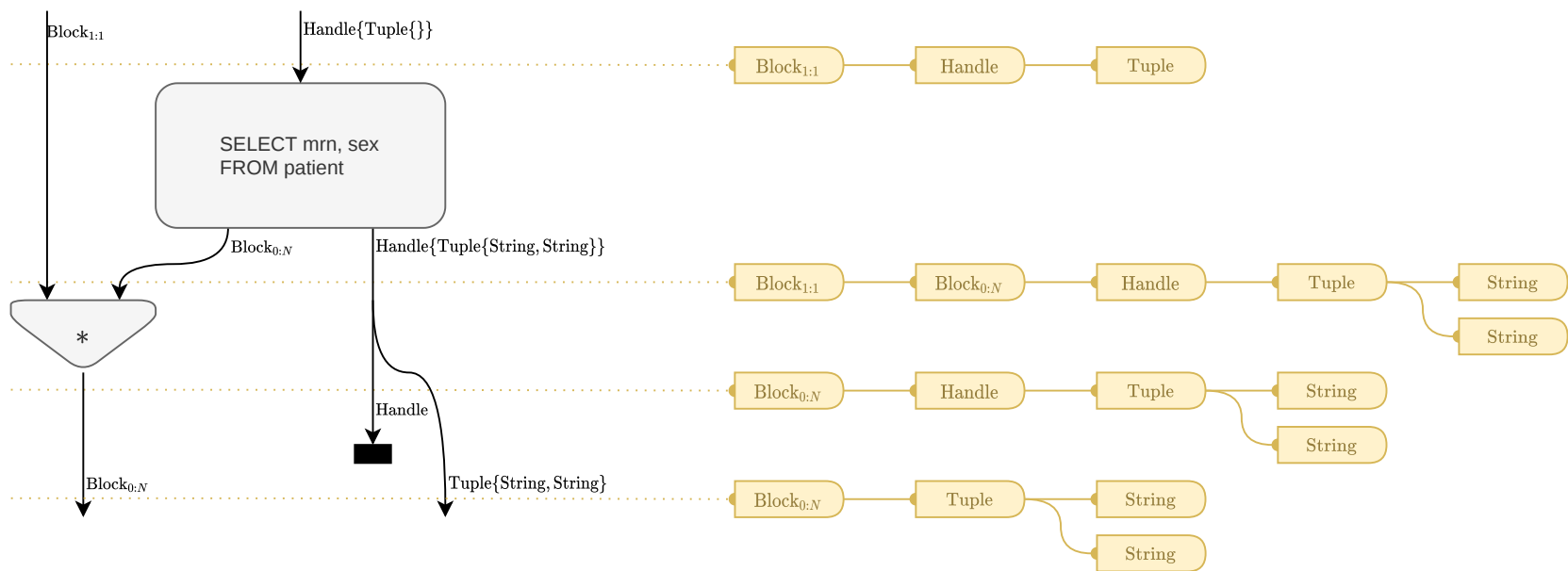




## SQL Pushdown

```
@query db patient{mrn,sex}
```

```
chain_of(with_elements(load_postgres_table(("public", "patient"), ["mrn", "sex"], [String, String])),
         flatten(),
         with_elements(output()))
```



```
struct EvalNode
  p::Pipeline
  i::NodeRef
end
```



Nothing



```
struct SlotNode
  n::NodeRef
  k::Int
end
```



```
struct HeadNode
  n::NodeRef
end
```



```
struct JoinNode
  head::NodeRef
  slots::Vector{NodeRef}
end
```



```
struct InputNode
end
```



```
mutable struct NodeRef
  node::Union{Nothing,Node}
end
```