QR Code Protocol Structure Markdown

For the first part of this showcase the first example ("Example 1") was used. (See Notion for more details)

Encoded as QR Code (String behind QR Code):

Source: Example 1 from Notion

```
000401NL1G001270111140209202430309202410309202442102092024010
::::0:64C8001F010203000000:419092024050920240000002BB04BB06B106BO08
BB0AB70CB10CBO0FBB12BB15BB18B118BO1CBB20BB24B124B724BO2ABB30BB36BB
3CB73CB13CBO48BB54B760BB6CB778B178BO
```

Main Body Structure definition

```
Structure:

    [DATA] [CHAR LENGTH] [VARIABLE IN FORM + NOTES]

-----------------------------------------------------

0004         [ 4] protocol_version
01           [ 2] [HEX] institution_id
nl1g001270   [10] survivor_id // todo
1            [ 1] gender
1            [ 1] t_care
1            [ 1] diagnosis
1            [ 1] has_teratoma_in_tumor
4            [ 1] orchidectomy
02092024     [ 8] orchidectomy_date
3            [ 1] treatment_chemotherapy_type
03092024     [ 8] chemotherapy_date
1            [ 1] radiotherapy
03092024     [ 8] radiotherapy_date ['::::::::' when empty]
42           [ 2] [HEX] radiotherapy_total_doses_radiation ['::'
```

```
when empty]
1            [ 1] rplnd
02092024     [ 8] rplnd_date [':::::::::' when empty]
0            [ 1] cardiovascular_event [':' when empty]
1            [ 1] trombo_embolic_event [':' when empty]
0            [ 1] bleomycin [':' when empty]
0            [ 1] relapse
::::::::     [ 8] relapse_date [':::::::::' when empty]
0            [ 1] [BITMASK] relapse_treatments >> [ (hex)1 =
(binary)0001 ] / [ (hex)d = (binary)1011 ]
:            [ 1] relapse_chemotherapy_type [':' when empty]
64           [ 2] weight
c8           [ 2] length
0            [ 1] has_metabolic_syndrome
0            [ 1] has_paresthesia
1f           [ 2] [BITMASK] medication >> [ (hex)1f =
(binary)11111 ] / [ (hex)15 = (binary)10101 ]
01 02        [ 2] [HEX] ` (treatment_ciscum_treatment     +
relapse_ciscum_treatment)     / 10   ` >> [ 10   + 11   = 21   /
10   = 2   ] NORMAL ROUNDING
02 03        [ 2] [HEX] ` (treatment_bleocum_treatment    +
relapse_bleocum_treatment)    / 10   ` >> [ 10   + 15   = 25   /
10   = 3   ] NORMAL ROUNDING
03 03        [ 2] [HEX] ` (treatment_etocum_treatment     +
relapse_etocum_treatment)     / 100  ` >> [ 100  + 190  = 290  /
100  = 3   ] NORMAL ROUNDING
00 03        [ 2] [HEX] ` (treatment_carbocum_treatment   +
relapse_carbocum_treatment)   / 100  ` >> [ 100  + 199  = 299  /
100  = 3   ] NORMAL ROUNDING
00 02        [ 2] [HEX] ` (treatment_ifosfamide_treatment +
relapse_ifosfamide_treatment) / 1000 ` >> [ 1000 + 1499 = 2499 /
1000 = 2   ] NORMAL ROUNDING
00 fe        [ 2] [HEX] ` (treatment_paclitaxel_treatment +
relapse_paclitaxel_treatment) / 10   ` >> [ 1270 + 1270 = 2540 /
10   = 254 ] NORMAL ROUNDING
:            [ 1] personal_follow_up_schema [':' or 1]
4            [ 1] [HEX] follow_up_scheme_type_id
19092024     [ 8] follow_up_start_date
05092024     [ 8] {{ today()->format('dd/mm/yyyy') }}
~~~~~~~~~~~~ [<=200] [DYNAMIC] follow_up_schema

Remaing characters for schema:


000002bb04bb06b106bo08bb0ab70cb10cbo0fbb12bb15bb18b118bo1cbb20bb24
```

```
b124b724bo2abb30bb36bb3cb73cb13cbo48bb54b760bb6cb778b178bo
```

Follow-up Schema Structure definition

The Schema is divided in events, all taking up 4 characters. So a string like `0CB10FBB12BB18B1` contains 4 events (`0CB1 0FBB 12BB 18B1`).
For the structure of these events, read the next two headings below.

A couple (important) notes about the structure:

- Start is always `0000`
- Negative months is not possible (Cannot plan anything before `follow_up_start_date`)
- Order of events in the string does NOT matter
- So `03BB 05B1` is the same as `05B1 03BB` and both are valid sequences (Except for spaces which were added for readability)
- There can be 2 events at the same month count
- This usually is used for 1 Who & 2 What (1 What in first event, and 1 in second)
- The second event will have the same Who as the first but is not shown in the UI
- The length of the `follow_up_schema` field is dynamic but with a max of 200 chars. (`200 / 4 = 50 max events`)

Single event structure

```
Example: "ABCD"

    AB = [HEX] Amount of months after `follow_up_start_date` (Max:
FF = 255 (~21 years))
    C  = [CHAR_MAPPED*] Who according to DB ID
    D  = [CHAR_MAPPED*] What according to DB ID. OR [Who] repeated
if no [What] is given)

*: For [CHAR_MAPPED] see the section "Who/What CHAR MAPPING" below
```

Follow-up Schema Structure

The schema structure exists of JUST the events and nothing more.

```
EVENT_STRUCTURE{repeated}
```

Decoding events:

Source: Example 2.1 from Notion

```
000003BB06B106BO09BB0CBO0CB10FBB12BB18B118BO1EBB30BB36BB3CB13CBO48
BB54BB60BB6CBB78BB21BB26B126BO5ABB
```

```
Structure:

    [DATA] [CHAR LENGTH] >> ([DATA] [EXPLANATION]){repeated}

-----------------------------------------------------

0000 [4] >> [00] +  0 months & [00] START
03BB [4] >> [03] +  3 months & [B] Oncoloog & [B] -
06B1 [4] >> [06] +  6 months & [B] Oncoloog & [1] CT-scan
06BO [4] >> [06] +  6 months & [B] Oncoloog & [O] Uitslag ( NOT A
ZERO ⚠️)
09BB [4] >> [09] +  9 months & [B] Oncoloog & [B] -
0CBO [4] >> [0C] + 12 months & [B] Oncoloog & [O] Uitslag
0CB1 [4] >> [0C] + 12 months & [B] Oncoloog & [1] CT-scan
0FBB [4] >> [0F] + 15 months & [B] Oncoloog & [B] -
12BB [4] >> [12] + 18 months & [B] Oncoloog & [B] -
18B1 [4] >> [18] + 24 months & [B] Oncoloog & [1] CT-scan
18BO [4] >> [18] + 24 months & [B] Oncoloog & [O] Uitslag
1EBB [4] >> [1E] + 30 months & [B] Oncoloog & [B] -
30BB [4] >> [30] + 48 months & [B] Oncoloog & [B] -
36BB [4] >> [36] + 54 months & [B] Oncoloog & [B] -
3CB1 [4] >> [3C] + 60 months & [B] Oncoloog & [1] CT-scan
3CBO [4] >> [3C] + 60 months & [B] Oncoloog & [O] Uitslag
48BB [4] >> [48] + 72 months & [B] Oncoloog & [B] -
54BB [4] >> [54] + 84 months & [B] Oncoloog & [B] -
60BB [4] >> [60] + 96 months & [B] Oncoloog & [B] -
6CBB [4] >> [6C] +108 months & [B] Oncoloog & [B] -
78BB [4] >> [78] +120 months & [B] Oncoloog & [B] -
21BB [4] >> [21] + 33 months & [B] Oncoloog & [B] -
26B1 [4] >> [26] + 38 months & [B] Oncoloog & [1] CT-scan
26BO [4] >> [26] + 38 months & [B] Oncoloog & [O] Uitslag
5ABB [4] >> [5A] + 90 months & [B] Oncoloog & [B] -
```

Who/What CHAR MAPPING:

The "Who / What" sections have a custom mapping. See below what this is:

```
0-9 = 0-9
  A = 10
  B = 11
  C = 12
  D = 13
  E = 14
  F = 15
  G = 16
  H = 17
  I = 18
  J = 19
  K = 20
  L = 21
  M = 22
  N = 23
  O = 24
  P = 25
  Q = 26
  R = 27
  S = 28
  T = 29
  U = 30
  V = 31
  W = 32
  X = 33
  Y = 34
  Z = 35
  ... (+ More? Docs say max: 43)
```

QR Code Examples

See screenshots of legacy SurvivorCare on Notion: Link to Notion

Example 1:

```
000401NL1G00127011114020920243030920241030920244210209202401
00::::::::0:64C8001F010203000000:4190920240509202400000
2BB04BB06B106BO08BB0AB70CB10CBO0FBB12BB15BB18B118BO1CBB20BB24B124B724BO2ABB30BB36BB3CB73CB13CBO48BB54B760BB6CB778B178BO
```

Example 2 (With Relapse):

```
000401NL1G00127920202040920247050320240:::::::::0:::::::::11109202414FA781106433C06060D0D:9110920240909202400000
3BB06B106BO09BB0CBO0CB10FBB12BB15BB18B118BO1EBB24BO24B12ABB30BB36BB3CB13CBO48BB54BB60BB6CBB78BB
```

Example 2.1 (With manually changed Schema):

```
000401NL1G00127920202040920247050320240:::::::::0:::::::::11109202414FA781106433C06060D0D191109202409092024000003BB06B106BO09BB0CBO0CB10FBB12BB18B118BO1EBB30BB36BB3CB13CBO48BB54BB60BB6CBB78BB21BB26B126BO5ABB
```

Example 3 (Test Rounding):

```
↓↓↓↓↓↓↓↓↓↓↓
000401NL1G00128010101040920007290420170:::::::::0:::::::::10109202217202100150203030302FE:130092024090920240000
```

Example 4 (Testing relapse treatments)

```
↓
000401NL1G00128210101040920007290420170:::::::::0:::::::::1:10109
2022D72021001502030303O2FE:130092024090920240000
```

Example 5 (Testing Schema, with manually changed Schema):

```
000401NL1G0012841:::2110920246100920240:::::::::0:::::::::::::::
::::0:::::::00000000020000:818092024090920240000003E606E609E60CE10C
EO0FE612E615E618EO18E11EE624E62AEE30EE36EE3CE13CEO20MN
```